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NEWS 40	May 19	Simultaneous left and right truncation added to WSCA
NEWS 41	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 42	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS 43	Jun 06	PASCAL enhanced with additional data

NEWS 44 Jun 20 2003 edition of the FSTA Thesaurus is now available
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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
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=> s flavon? and ascorb?
L1        4327 FLAVON? AND ASCORB?

=> s l1 and dermato?
  33 FILES SEARCHED...
L2         283 L1 AND DERMATO?

=> s l1 and cosmetic
L3         424 L1 AND COSMETIC

=> s l3 and palmitate
L4         270 L3 AND PALMITATE

=> s l4 and sodium and magnesium and phosphate
L5         157 L4 AND SODIUM AND MAGNESIUM AND PHOSPHATE

=> s l3 and complex
L6         199 L3 AND COMPLEX

=> s l5 and l6
L7         104 L5 AND L6

=> s l7 and ethylenediaminetetraacetic
L8           2 L7 AND ETHYLENEDIAMINETETRAACETIC

=> d l8 1-2

L8   ANSWER 1 OF 2  USPATFULL
AN     2002:322572  USPATFULL
TI     Methods to measure lipid antioxidant activity
IN     Aldini, Giancarlo, Milan, ITALY
       Yeum, Kyung-Jin, Winchester, MA, UNITED STATES
```

PA TRUSTEES OF TUFTS COLLEGE (non-U.S. corporation)
PI US 2002182736 A1 20021205
AI US 2002-114181 A1 20020402 (10)
PRAI US 2001-280920P 20010402 (60)
DT Utility
FS APPLICATION
LN.CNT 2200
INCL INCLM: 436/051.000
NCL NCLM: 436/051.000
IC [7]
ICM: G01N035-02

L8 ANSWER 2 OF 2 USPATFULL
AN 2002:272486 USPATFULL
TI Use of folic acid and/or derivatives thereof for the preparation of **cosmetic** or dermatological preparations for the prophylaxis of damage to DNA intrinsic to the skin and/or for the repair of existing damage to DNA intrinsic to the skin
IN Max, Heiner, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Will, Katriu, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Schimpf, Ralph, Bonningstedt, GERMANY, FEDERAL REPUBLIC OF
Raschke, Thomas, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Hargens, Birgit, Hamburg, GERMANY, FEDERAL REPUBLIC OF
PA Beiersdorf Aktiengesellschaft (non-U.S. corporation)
PI US 2002150601 A1 20021017
AI US 2001-21627 A1 20011212 (10)
PRAI DE 2000-10062401 20001214
DT Utility
FS APPLICATION
LN.CNT 730
INCL INCLM: 424/401.000
INCLS: 514/251.000
NCL NCLM: 424/401.000
NCLS: 514/251.000
IC [7]
ICM: A61K031-525
ICS: A61K007-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l8 1-2 kwic

L8 ANSWER 1 OF 2 USPATFULL
SUMM . . . be incubated with a hydrophilic radical generator that includes, but is not limited to, an azo radical generator, 2,2'-azobis[2-(5-methyl-2-imidazolin-2-yl)propane]dihydrochloride, iron, **ascorbic** acid and metal ions. In one embodiment, the hydrophilic radical generator is an azo radical generator selected from the group.
. .
SUMM . . . capacity in aqueous compartment can be determined statistically from the data obtained by analyses of water-soluble antioxidant levels, such as **ascorbic** acid, uric acid and water-soluble **flavonoids** (catechin, epigallocatechin gallate etc.), and hydrophilic antioxidant capacity in a large population of healthy individuals.
SUMM [0024] In one embodiment, at least one aqueous antioxidant is administered, e.g., **ascorbic** acid. In another embodiment, a combination of aqueous antioxidants are administered, e.g., **ascorbic** acid and water-soluble polyphenols such as catechins, isoflavones, and procyanidins. Uric acid may be increased by ingesting uric acid containing food, and polyphenols. In yet another embodiment, at least one aqueous antioxidant e.g., **ascorbic** acid and at

least one lipid antioxidant, e.g., .alpha.-tocopherol are administered. In yet another embodiment, a combination of aqueous antioxidants e.g., **ascorbic** acid and water-soluble polyphenols such as catechins, isoflavones, and procyanidins, and **ascorbic** acid and combination of lipid antioxidants, e.g., .alpha.-tocopherol and .beta.-carotene are administered.

DRWD [0028] FIG. 1 is a graph comparing the effects of AAPH and MeO-AMVN on the levels of the hydrophilic antioxidants **ascorbic** acid (AA) and uric acid (UA) in human plasma over time;

DETD . . . and .delta.-tocopherol), which are located in the interface of the lipid compartment, and retinoids (e.g. vitamin A, retinol, and retinyl **palmitate**) and fat-soluble polyphenols such as quercetin. Examples of aqueous antioxidants include, but are not limited to, **ascorbic** acid and its oxidized form, "dehydroascorbic acid", uric acid and its oxidized form, "allantoin", bilirubin, albumin and vitamin C and. . .

DETD . . . steroids, eicosanoids, waxes, and fat-soluble vitamins. Some lipids may be generally classified into two groups, the simple lipids and the **complex** lipids. By way of non-limiting example, simple lipids include triglycerides or fats and oils, which are fatty acid esters of. . . esters of long-chain alcohols, and steroids such as cholesterol and ergosterol, which are derived from partially or completely derived pheanthrene. **Complex** lipids include, for example, phosphatides or phospholipids, which are lipids that contain phosphorous, glycolipids, which are lipids that contain carbohydrate. . .

DETD . . . and globulins; antibodies; enzymes; small amounts of nutritive organic materials, such as amino acids and glucose; inorganic substances such as **sodium**, choloride, sulfates, phosphates, calcium, potassium, bicarbonate, **magnesium**, iodine, zinc, and iron; small amounts of waste products, such as urea, uric acid, xanthine, creatinine, creatine, bile pigments and. . . dioxide. The fluid sample may also be a non-biological sample, for example, chemical formulations, synthetic compositions, or food products and **cosmetic** products.

DETD . . . 2,2'-azobis (2-methylproprionate) (DAMP), and 2,2'-azobis-(2-amidinopropane). Examples of hydrophilic azo radical generators include, but are not limited to, 2,2'-azobis[2-(5-methyl-2-imidazolin-2 yl)propane]dihydrochloride, iron, **ascorbic** acid and metal ions.

DETD . . . steroids, eicosanoids, waxes, and fat-soluble vitamins. Some lipids may be generally classified into two groups, the simple lipids and the **complex** lipids. By way of non-limiting example, simple lipids include triglycerides or fats and oils, which are fatty acid esters of. . . esters of long-chain alcohols, and steroids such as cholesterol and ergosterol, which are derived from partially or completely derived pheanthrene. **Complex** lipids include, for example, phosphatides or phospholipids, which are lipids that contain phosphorous, glycolipids, which are lipids that contain carbohydrate. . .

DETD . . . The method of the invention may also be used to determine the oxidation of fatty acids in food products and **cosmetic** products.

DETD . . . lycopene, .alpha.-carotene, trans-.beta.-carotene, total-.beta.-carotene; tocopherols (vitamin E) such as .alpha.-tocopherol, gamma-tocopherol and delta-tocopherol; retinoids (vitamin A) such as retinol, retinyl **palmitate** and Ubiquinone--Coenzyme Q10.

DETD [0099] Examples of aqueous antioxidants include, but are not limited to, **ascorbic** acid and its oxidized form, "dehydroascorbic acid", uric acid and its oxidized form, "allantoin," bilirubin, albumin, vitamin C, and water-soluble. . .

DETD . . . New York (1990)). It is likely that vitamin A acts at the promotion or progression phase of carcinogenesis. Vitamin C (**ascorbic** acid) may also act as an antioxidant by preventing nitrosamine formation in the stomach and reducing fecal mutagenicity. Vitamin E. . .

DETD . . . form suitable for topical application. For example, as a lotion, aqueous or aqueous-alcoholic gels, vesicle dispersions or as simple or **complex** emulsions (O/W, W/O, O/W/O or W/O/W emulsions), liquid, semi-liquid or solid consistency, such as milks, creams, gels, cream-gels, pastes and. . .

DETD . . . agents. In many cases, it will be preferable to include isotonic agents, for example, sugars, polyalcohols such as manitol, sorbitol, **sodium** chloride in the composition. Prolonged absorption of the injectable compositions can be brought about by including in the composition an. . .

DETD . . . an integral role in collagen synthesis (Zhang et al., Bioelectrochem Bioenerg 48:453-61 (1999)). Clinical studies show that antioxidants in a **cosmetic** vehicle can inhibit the induction of lipid peroxidation in stratum corneum lipids, which are produced endogenously or induced by UVB. . .

DETD [0126] The method of the invention can be used in monitoring the effectiveness of new topical **cosmetic** products as well as in studying the protective mechanism of antioxidants. In addition, the method of the invention could be. . .

DETD [0132] After an overnight fast (10-12 h), blood from two healthy donors (32 and 35 years old) was collected in **ethylenediaminetetraacetic** * acid (EDTA)-containing tubes. In order to reduce the variability of different donors, blood samples from these two subjects were collected.** . .

DETD **[0135] AAPH was prepared in ***phosphate** buffered saline (50 mM, pH 7.4, PBS) and stored at -20.degree. C., while AMVN and MeO-AMVN were prepared respectively in. . .

DETD [0139] The major water-soluble antioxidants (**ascorbic** acid and uric acid) were measured at 5 min, 15 min, 30 min, 1 hr, 2 hr, 3 hr and 4 hr. For water-soluble antioxidant measurement, the mixtures were immediately deproteinized with perchloric acid (250 mM). **Ascorbic** acid and uric acid in plasma was analyzed by HPLC using an electrochemical detector (Bioanalytical System, Inc, N. Lafayette, Ind.). . .

DETD [0155] The results of the study show that the major hydrophilic (**ascorbic** acid and uric acid) and lipophilic (.alpha.-tocopherol and .beta.-carotene) plasma antioxidants were consumed in a time-dependent manner in the presence. . .

DETD . . . UA (.quadrature.); MeO-AMVN (2 mM): AA (.circle-solid.), UA (.smallcircle.). Values are mean.+-.SD of three independent experiments. The initial concentrations of **ascorbic** acid (AA) and uric acid (UA) were respectively 48 .mu.M and 220 .mu.M. The azo-compounds were added to plasma samples. . . concentration of AA and UA assayed by HPLC as described in the text. The results from FIG. 1 show that **ascorbic** acid and uric acid were completely consumed within 15 min and 180 min, respectively using 20 mM AAPH. The consumption of these antioxidants was significantly slower in the presence of 2 mM MeO-AMVN since total disappearance of **ascorbic** acid and uric acid was observed after 30 min and 300 min, respectively.

DETD . . . min of incubation. The rate of consumption was significantly lower at 1 mM MeO-AMVN. In contrast to the consumption of **ascorbic** acid, uric acid and .alpha.-tocopherol, the kinetics of .beta.-carotene depletion was faster in the presence of 2 mM MeO-AMVN as. . .

DETD [0159] In the presence of AAPH (20 mM), the following order of disappearance of antioxidants was observed: **ascorbic** acid>.alpha.-tocopherol>uric acid and .beta.-carotene indicating a

gradient of peroxyl radicals from the aqueous to the lipid phase. **Ascorbic** acid could effectively trap hydrophilic peroxyl radicals in the aqueous phase of plasma before they are able to diffuse into. . . in health and disease. New York: Marcel Dekker Inc.; 1993:131-139). Similar consumptions of uric acid and .beta.-carotene indicate that once **ascorbic** acid has been completely consumed, the remaining water-soluble antioxidants provide only a partial trap for the aqueous peroxyl radicals, which. . .

DETD [0160] When MeO-AMVN (2 mM), was used as the radical inducer, the order of disappearance was partially reversed with .alpha.-tocopherol.congruent.**ascorbic** acid>.beta.-carotene>>uric acid. .beta.-carotene was consumed earlier than uric acid and almost at the same time as .alpha.-tocopherol, reflecting the diffusion and activation of MeO-AMVN in the lipophilic phase. The consumption of **ascorbic** acid by the lipophilic radical inducer, MeO-AMVN, suggests that **ascorbic** acid can repair the .alpha.-tocopheroxyl radical thereby regenerating .alpha.-tocopherol, and permitting it to function again as a free radical chain-breaking. . .

DETD . . . 90 min with 20 mM AAPH and at 180 min with 10 mM AAPH, corresponding to the depletion of both **ascorbic** acid and uric acid (FIG. 1). MeO-AMVN (2 mM) induced the propagation phase only after 270 min of incubation. No. . .

DETD . . . as radical generator, the aqueous oxidation started after a lag phase of 120 min, corresponding to the depletion of both **ascorbic** acid and uric acid (Aldini et al., Free Rad. Biol. Med. 31(9): 1043-1050 (2001)). EGCG addition reduced the oxidative process. . .

DETD . . . hydrophilic and lipophilic plasma endogenous antioxidants consumption, plasma was incubated with EGCG. When 20 mM AAPH was added to plasma, **ascorbic** acid and uric acid were almost totally consumed respectively within 15 and 180 min. EGCG at all the concentrations tested. . .

DETD . . . antioxidants depletion. By contrast, EGCG was ineffective (up to 10 .mu.M) to spare the main hydrophilic endogenous antioxidants such as **ascorbic** acid (AA) and uric acid (UA). As reported by Lolito et al. (Lolito et al., Proc Soc Exp Biol Med. . .

DETD . . . significant at 2 .mu.M (% inhibition of ESR signal=8.+-.1.3%) to reach an almost complete disappearance at 25 .mu.M (IC.sub.50=12.1 .mu.M). **Ascorbic** acid, the physiological recycling agent of .alpha.-tocopherol showed an IC.sub.50=14.2 EGCG dose-dependently reduced the AAPH induced consumption of the lipophilic. . . antioxidants depletion. By contrast, EGCG was ineffective (up to 10 .mu.M) to spare the main hydrophilic endogenous antioxidants such as **ascorbic** acid and uric acid. Although less than in the aqueous compartment, EGCG was found to dose-dependently inhibit the oxidative damage. . .

CLM What is claimed:

. . . radical generator further comprises selecting a hydrophilic radical generator selected from the group consisting of azo radical generator, 2,2'-azobis[2-(5-methyl-2-imidazolin-2-yl)propane]dihydrochloride, iron, **ascorbic** acid and metal ions.

L8 ANSWER 2 OF 2 USPATFULL

TI Use of folic acid and/or derivatives thereof for the preparation of **cosmetic** or dermatological preparations for the prophylaxis of damage to DNA intrinsic to the skin and/or for the repair of existing. . .

AB Use of folic acid and/or derivatives thereof for the preparation of **cosmetic** or dermatological preparations for the prophylaxis of damage to DNA intrinsic to the skin and/or for the repair of existing. . .

SUMM [0001] The present invention relates to the use of folic acid and/or derivatives thereof for the preparation of **cosmetic** or dermatological preparations for the prophylaxis of damage to DNA intrinsic to the skin and/or for the repair of existing. . .

SUMM . . . to the maintenance of a healthy vital skin. Stimulation of and support to repair systems intrinsic to the skin by **cosmetic** -dermatological ingredients are therefore very important.

SUMM [0012] Surprisingly, these objects are achieved by the use of folic acid for the preparation of **cosmetic** or dermatological preparations for the prophylaxis of damage to DNA intrinsic to the skin and/or for the repair of existing. . .

SUMM . . . the organism, folic acid is in equilibrium with 7,8-dihydrofolic acid (H.sub.2folate; old abbreviation: FH.sub.2) with participation by nicotinamide adenine dinucleotide **phosphate** and of the enzyme dihydrofolate reductase. H.sub.2folate in turn arises in plants and a few microorganisms via a number of. . .

SUMM [0020] According to the invention, the **cosmetic** or dermatological preparations can have the customary composition and be used for the treatment, care and cleansing of the skin. . .

SUMM . . . to the invention relates to folic acid itself, and not to its derivatives, to manage without other such substances, namely **flavonoids**.

SUMM . . . is advantageous to add complexing agents to the folic acid and/or derivatives thereof used according to the invention, or to **cosmetic** or dermatological preparations comprising folic acid and/or derivatives thereof.

SUMM . . . undesired metals such as Mn, Fe, Cu and others, it is possible, for example, to prevent undesired chemical reactions in **cosmetic** or dermatological preparations.

SUMM . . . one co-ordination site on a central atom. In this case, normally extended compounds are thus closed as a result of **complex** formation via a metal atom or a metal ion to form rings. The number of bonded ligands depends on the. . .

SUMM . . . of tartaric acid and anions thereof, citric acid and anions thereof, aminopolycarboxylic acids and anions thereof (such as, for example, **ethylenediaminetetraacetic** acid (EDTA) and anions thereof, nitrilotriacetic acid (NTA) and anions thereof, hydroxyethylenediaminotriacetic acid (HOEDTA) and anions thereof, diethyleneaminopentaacetic acid (DPTA). . .

SUMM [0027] According to the invention, the further complexing agent(s) is/are advantageously present in **cosmetic** or dermatological preparations preferably in amounts of from 0.01% by weight to 10% by weight, preferably from 0.05% by weight. . .

SUMM [0028] For use, according to the invention, the **cosmetic** and dermatological preparations are applied to the skin and/or the hair in an adequate amount in the customary manner for. . .

SUMM [0029] **Cosmetic** and dermatological preparations according to the invention can be in various forms. Thus, they can, for example, be a solution,. . .

SUMM [0031] The **cosmetic** and dermatological preparations according to the invention, can comprise **cosmetic** auxiliaries such as are usually used in such preparations, for example preservatives, bactericides, perfumes, antifoams, dyes, pigments which have a coloring action, thickeners, surfactants, emulsifiers, softeners, moisturizers and/or humectants, fats, oils, waxes or other customary constituents of a **cosmetic** or dermatological preparation, such as alcohols, polyols, polymers, foam stabilizers, electrolytes, organic solvents or silicone derivatives.

SUMM . . . linoleic acid, oleic acid), folic acid and derivatives thereof, ubiquinone and ubiquinol and derivatives thereof, vitamin C and derivatives (e.g. **ascorbyl palmitate**, Mg **ascorbyl phosphate**, **ascorbyl** acetate),

tocopherols and derivatives (for example vitamin E acetate), vitamin A and derivatives (vitamin A **palmitate**) and coniferyl benzoate of benzoin resin, rutinic acid and derivatives thereof, .alpha.-glycosylrutin, ferulic acid, furfurylideneglucitol, carnosine, butylhydroxytoluene, butylhydroxyanisole, nordihydroguaiacic resin. . .

SUMM . . . to 30 carbon atoms. Such ester oils can then be advantageously chosen from the group consisting of isopropyl myristate, isopropyl **palmitate**, isopropyl stearate, isopropyl oleate, n-butyl stearate, n-hexyl laurate, n-decyl oleate, isooctyl stearate, isononyl stearate, isononyl isononanoate, 2-ethylhexyl **palmitate**, 2-ethylhexyl laurate, 2-hexyldecyl stearate, 2-octyldodecyl **palmitate**, oleyl oleate, oleyl erucate, erucyl oleate, erucyl erucate and synthetic, semi-synthetic and natural mixtures of such esters, e.g. jojoba oil.

SUMM . . . wax components can also advantageously be used. When required, it may also be advantageous to use waxes, for example cetyl **palmitate**, as the sole lipid component of the oil phase.

SUMM . . . in particular from 1.0 to 6.0% by weight, based on the total weight of the preparations, in order to provide **cosmetic** formulations which protect the skin or hair from the entire range of ultraviolet radiation. They can also be used as. . .

SUMM [0068] salts of 2-phenylbenzimidazole-5-sulfonic acid, such as its **sodium**, potassium or its triethanolammonium salt, and the sulfonic acid itself;

SUMM . . . acid, 2-methyl-5-(2-oxo-3-bornylidenemethyl)sulfonic acid and their salts, and also 1,4-di(2-oxo-10-sulfo-3-bornylidenemethyl)benzene and its salts (the corresponding 10-sulfato compounds, for example the corresponding **sodium**, potassium or triethanolammonium salt) also referred to as benzene-1,4-di(2-oxo-3-bornylidenemethyl)-10-sulfonic acid.

SUMM . . . for the use of a combination of folic acid and/or derivatives thereof with at least one UVB filter in a **cosmetic** or dermatological preparation.

SUMM . . . acid and/or derivatives thereof used according to the invention with UVA filters which have to date customarily been present in **cosmetic** preparations. These substances are preferably derivatives of dibenzoylmethane, in particular 1-(4'-tert-butylphenyl)-3-(4'-methoxyphenyl)propane-1,3-dione and 1-phenyl-3-(4'-isopropylphenyl)propane-1,3-dione. These combinations and preparations comprising these combinations. . .

SUMM . . . of a combination of folic acid and/or derivatives thereof with at least one UVA filter as an antioxidant in a **cosmetic** or dermatological preparation.

SUMM . . . and/or derivatives thereof with at least one UVA filter and at least one UVB filter as an antioxidant in a **cosmetic** or dermatological preparation.

SUMM [0076] **Cosmetic** and dermatological preparations with an effective content of folic acid and/or derivatives thereof can also contain inorganic pigments which are. . .

SUMM [0078] **Cosmetic** and dermatological preparations for protecting the hair against UV rays according to the invention are, for example, shampoos, preparations which. . .

SUMM [0079] The **cosmetic** and dermatological preparations comprise active ingredients and auxiliaries as are usually used for this type of preparation for hair care. . . emulsifiers, fats, oils, waxes, organic solvents, bactericides, perfumes, dyes or pigments whose task is to color the hair or the **cosmetic** or dermatological preparation itself, electrolytes and anti-grease substances.

SUMM . . . For the purposes of the present invention, electrolytes are understood as meaning water-soluble alkali metal, ammonium, alkaline earth metal (including **magnesium**) and zinc salts of inorganic

anions and any mixtures of such salts, it being necessary to ensure that these salts. . .

SUMM [0082] **Cosmetic** preparations in the form of a skin cleanser or shampoo preferably comprise at least one anionic, nonionic or amphoteric surface-active. . .

SUMM [0083] If the **cosmetic** or dermatological preparations are in the form of a lotion which is rinsed out and applied, for example, before or. . .

SUMM [0084] These **cosmetic** or dermatological preparations can also be in the form of aerosols with the auxiliaries usually used for this purpose.

SUMM [0085] A **cosmetic** preparation in the form of a lotion which is not rinsed out, in particular a lotion for setting the hair,. . .

SUMM [0086] **Cosmetic** preparations for treating and caring for the hair which comprise folic acid and/or derivatives thereof can be in the form. . .

SUMM [0087] According to the invention, **cosmetic** preparations for treating and caring for the hair can be in the form of gels which, in addition to an. . . according to the invention and solvents usually used therefor, preferably water, also contain organic thickeners, e.g. gum arabic, xanthan gum, **sodium** alginate, cellulose derivatives, preferably methylcellulose, hydroxymethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose or inorganic thickeners, for example aluminum silicates such as, for example,. . .

SUMM [0089] Aqueous **cosmetic** cleansers according to the invention or low-water or water-free cleanser concentrates intended for aqueous cleansing may comprise anionic, nonionic and/or. . .

SUMM [0090] conventional soaps, e.g. fatty acid salts of **sodium**

SUMM [0103] **Cosmetic** preparations which are **cosmetic** skin cleansing preparations can be in liquid or solid form. In addition to folic acid and/or derivatives thereof, they preferably. . .

SUMM [0104] **Cosmetic** preparations in the form of a shampoo preferably comprise, in addition to an effective amount of folic acid and/or derivatives. . .

SUMM [0106] The present invention also covers a **cosmetic** method of protecting the skin and hair against oxidative or photooxidative processes which comprises applying a **cosmetic** composition which comprises an effective concentration of folic acid and/or derivatives thereof in a sufficient quantity to the skin or. . .

SUMM [0107] The present invention likewise also covers a method of protecting **cosmetic** or dermatological preparations against oxidation or photooxidation, these preparations being, for example, preparations for the treatment and care of hair,. . . nail varnishes, lipsticks, foundations, washing and shower preparations, creams for the treatment or care of the skin or all other **cosmetic** preparations whose constituents may be associated with stability problems because of oxidation or photooxidation during storage, wherein the **cosmetic** preparations have an effective content of folic acid and/or derivatives thereof.

SUMM [0109] The invention also provides the process for the preparation of the **cosmetic** compositions according to the invention, which comprises incorporating folic acid and/or derivatives thereof into **cosmetic** or dermatological formulations in a manner known per se.

DETD . . . stearate citrate 2.00

Stearyl alcohol	5.00
Caprylic/capric triglycerides	4.00
Octyldodecanol	4.00
Glycerol	3.00
Carbomer	0.10
Folic acid	0.30

	EDTA	0.10
	Sodium hydroxide	q.s.
	Preservative	q.s.
	Perfume	q.s.
	Water, demineralized	ad 100.00
	pH adjusted to 6.00	
DETD	. . . stearates	1.00
	Cetyl alcohol	3.00
	Caprylic/capric triglycerides	5.00
	Paraffin oil	5.00
	Glycerol	3.00
	Carbomer	0.10
	Folic acid	0.10
	EDTA	0.10
	Sodium hydroxide	q.s.
	Preservative	q.s.
	Perfume	q.s.
	Water, demineralized	ad 100.00
	pH adjusted to 7.0	
DETD	. . . 2.00	
	Dicaprylyl ether	4.00
	Caprylic/capric triglycerides	3.00
	Paraffin oil	2.00
	Glycerol	3.00
	Butylene glycol	3.00
	Carbomer	0.10
	Folic acid	1.00
	Sodium hydroxide	q.s.
	Preservative	q.s.
	Perfume	q.s.
	Water, demineralized	ad 100.00
	pH adjusted to 7.5	
DETD	. . . stearate	1.00
	Stearyl alcohol	1.00
	Caprylic/capric triglycerides	2.00
	Paraffin oil	4.00
	Glycerol	3.00
	Carbomer	0.10
	Folic acid	0.50
	Tocopherol	0.05
	Sodium hydroxide	q.s.
	Preservative	q.s.
	Perfume	q.s.
	Water, demineralized	ad 100.00
	pH adjusted to 5.5	
DETD	[0115]	

% by wt.

Triglycerol diisostearate	3.50
Glycerol	3.00
Polyglyceryl-2 polyhydroxystearate	3.50
Folic acid	0.10
Magnesium sulfate	0.60
Isopropyl stearate	2.00
Dicaprylyl ether	8.00
Cetearyl isononanoate	6.00
Preservative	q.s.
Perfume	q.s.
Water, demin.	ad 100.00

DETD . . .

% by wt.

Glyceryl stearate SE	5.00
Stearyl alcohol	2.00
Dimethicone	2.00
Glycerol	3.00
Carbomer	0.15
Mica	1.00
Magnesium silicate	1.00
Iron oxide	1.00
Titanium dioxide	2.50
Talc	5.00
Folic acid	1.00
Sodium hydroxide	q.s.
Preservative	q.s.
Perfume	q.s.
Water, demineralized	ad 100.00
pH adjusted to 6.0	

DETD . . . stearate 3.00

PEG-100 stearate	0.75
Behenyl alcohol	2.00
Caprylic/capric triglycerides	8.00
Octyldodecanol	5.00
C.sub.12-15-alkyl benzoate	3.00
Panthenol	3.00
BHT	0.05
Magnesium sulfate (MgSO.sub.4)	0.80
EDTA	0.10
Folic acid	0.10
Preservative	q.s.
Perfume	q.s.
Water, demineralized	ad 100.00
pH adjusted to 6.0	

DETD . . . wt.

Carbomer	0.40
Xanthan gum	0.20
Cetylstearyl alcohol	2.00
C.sub.12-15-alkyl benzoates	5.00
Caprylic/capric triglycerides	3.00
Glycerol	3.00
Folic acid	0.30
Sodium hydroxide	q.s.
Preservative	q.s.
Perfume	q.s.
Water, demineralized	ad 100.00
pH adjusted to 6.5	

CLM What is claimed is:

2. The method according to claim 1, which comprises topically applying to skin a **cosmetic** or topical dermatological preparation comprising folic acid and/or a derivative thereof in a concentration of 0.01-10% by weight based on. . .

3. The method according to claim 2, which comprises topically applying to skin a **cosmetic** or topical dermatological preparation comprising folic acid and/or a derivative thereof in a concentration of 0.05-5% by weight based on. . .

4. The method according to claim 3, which comprises topically applying

to skin a **cosmetic** or topical dermatological preparation comprising folic acid and/or a derivative thereof in a concentration of 0.1-2% by weight based on. . .
5. A **cosmetic** preparation comprising dihydrofolic acid and/or tetrahydrofolic acid.

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=> d his

     (FILE 'HOME' ENTERED AT 14:22:35 ON 08 JUL 2003)

     FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT,
     CAPLUS, CEN, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL,
     EMBASE, ESBIOBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF,
     MEDLINE, NAPRALERT, NLDB, NUTRACEUT, ...' ENTERED AT 14:25:26 ON 08 JUL
     2003
L1          4327 S FLAVON? AND ASCORB?
L2           283 S L1 AND DERMATO?
L3           424 S L1 AND COSMETIC
L4           270 S L3 AND PALMITATE
L5           157 S L4 AND SODIUM AND MAGNESIUM AND PHOSPHATE
L6           199 S L3 AND COMPLEX
L7           104 S L5 AND L6
L8             2 S L7 AND ETHYLENEDIAMINETETRAACETIC

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ENTER LOGIC EXPRESSION, QUERY NAME, OR (END):s
   4 FILES SEARCHED...
  16 FILES SEARCHED...
  26 FILES SEARCHED...
  35 FILES SEARCHED...
COMMAND INTERRUPTED
COMMAND STACK INTERRUPTED.  ENTER "DISPLAY HISTORY"
TO SEE WHICH COMMANDS WERE EXECUTED.

If this message appears repeatedly, please notify the Help Desk.
Enter "HELP STN" for information on contacting the nearest STN Help
Desk by telephone or via SEND in the STNMAIL file.

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     FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT,
     CAPLUS, CEN, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL,
     EMBASE, ESBIOBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF,
     MEDLINE, NAPRALERT, NLDB, NUTRACEUT, ...' ENTERED AT 14:25:26 ON 08 JUL
     2003
L1          4327 S FLAVON? AND ASCORB?
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L6           199 S L3 AND COMPLEX
L7           104 S L5 AND L6
L8             2 S L7 AND ETHYLENEDIAMINETETRAACETIC

=> s l1 and complex and ethylenediaminetetraacetic
L9            29 L1 AND COMPLEX AND ETHYLENEDIAMINETETRAACETIC

=> d l9 1-29 bib kwic
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L9 ANSWER 1 OF 29 USPATFULL
AN 2003:152341 USPATFULL
TI Pseudopterosin compounds of Symbiodinium spp isolated from Pseudopterogorgia elisabethae
IN Jacobs, Robert S., Santa Barbara, CA, UNITED STATES
Mydlarz, Laura, Santa Barbara, CA, UNITED STATES
Kerr, Russell G., Boca Raton, FL, UNITED STATES
PI US 2003104007 A1 20030605
AI US 2002-264026 A1 20021004 (10)
PRAI US 2001-327028P 20011005 (60)
US 2001-340833P 20011219 (60)
DT Utility
FS APPLICATION
LREP Suzannah K. Sundby, Esq., Jacobson Holman PLLC, The Jenifer Building, 400 Seventh Street, N.W., Washington, DC, 20004
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1560
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . sacrificed. As animal products are often undesirable for use in pharmaceutical and cosmetics, many have attempted to chemically synthesize these **complex** compounds. Others have attempted elucidate the biosynthetic pathway to make pseudopterosins with in vitro and in vivo recombinant systems that. . .
DETD . . . see for example, Scheme 1, and are represented as o-glycosides. Glycosides can include simple phenolic compounds, tannins, courmarins, anthraquinones, nathoquinones, **flavones**, and other biosynthetic natural products. The anti-inflammatory glycosides of salicylic acid are widely distributed in higher plants. The polarity and. . .
DETD . . . benzoic acid, 2-acetoxybenzoic acid, acetic acid, phenylacetic acid, propionic acid, glycolic acid, stearic acid, lactic acid, malic acid, tartaric acid, **ascorbic** acid, maleic acid, hydroxymaleic acid, glutamic acid, salicylic acid, sulfanilic acid, and fumaric acid. Exemplary base-addition salts include those derived. . .
DETD . . . that the actual dosages of the agents used in the compositions of this invention will vary according to the particular **complex** being used, the particular composition formulated, the mode of administration, and the particular site, host, and disease being treated. Optimal. . .
DETD . . . glycols, glycerine, propylene glycol or other synthetic solvents; antibacterial agents such as benzyl alcohol or methyl parabens; antioxidants such as **ascorbic** acid or sodium bisulfite; chelating agents such as **ethylenediaminetetraacetic** acid; buffers such as acetates, citrates or phosphates and agents for the adjustment of tonicity such as sodium chloride or. . .
DETD . . . Prevention of the action of microorganisms can be achieved by various antibacterial and antifungal agents, for example, parabens, chlorobutanol, phenol, **ascorbic** acid, thimerosal, and the like. In many cases, it will be preferable to include isotonic agents, for example, sugars, polyalcohols. . .

L9 ANSWER 2 OF 29 USPATFULL
AN 2003:152248 USPATFULL
TI Oral care compositions
IN Lawlor, Thomas Mark, Middlesex, UNITED KINGDOM
PA The Procter & Gamble Company (non-U.S. corporation)
PI US 2003103914 A1 20030605
AI US 2002-146355 A1 20020515 (10)
PRAI US 2001-291174P 20010515 (60)

DT Utility
FS APPLICATION
LREP THE PROCTER & GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION, WINTON HILL TECHNICAL CENTER - BOX 161, 6110 CENTER HILL AVENUE, CINCINNATI, OH, 45224
CLMN Number of Claims: 34
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1735
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . previously been discussed. Furthermore it is likely that such extracts, in common with other similar plant extracts, are unstable in **complex** formulations. As such there remains a need to stabilise compositions comprising such materials.

SUMM [0013] When used in addition with a further oral care active both basic and **complex** synergistic effects can be noted. For example, if the extract is used in addition with a desensitising agent eg potassium. . . are those of both agents singly eg malodour reduction and desensitisation. This is an example of basic synergy. However, more **complex** synergistic benefits can also be noted. For example if extract is used in conjunction with another anti-plaque agent the action. . .

SUMM . . . flavanoids narigin, isoacuranetin, neohesperidin, hesperidin, poncirin, nobiletin and tangeretin. Grape seed extract comprises the polyphenols from the chemical class of **flavonoids**. These can be further broken down into flavnaol, proanthocynidins, flavanones and **flavononls** (from grape skin), anthocyanins, anthocyanidinds, and anthocyanosides.

SUMM [0046] Many extracts of this type also comprise **ascorbic** acid. It is preferred that extracts for use in the present invention comprise less than about 15%, preferably less than about 12% and more preferably less than about 10%, by weight of the extract, of **ascorbic** acid.

SUMM . . . be formed by the use of emulsifying agents, fatty acids eg lecithin. Encapsulation can also be made using compounds that **complex** the polyphenols such as cyclodextrin. Similarly polyphenols can be adsorbed within inorganic structures such as silica shell, zeolites.

SUMM . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Bendict, Bush and Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No 490,384 date Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .

SUMM [0068] Another class of oral malodour control agents include absorbents. These are used to absorb, adsorb, bind or otherwise **complex** the volatile oral malodour materials. Examples of such agents include talc, mushroom extract, zeolite, cyclodextrin, silica shell and mixtures thereof.. . .

SUMM . . . may be included in the oral care compositions of the present invention include, but are not limited to, Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, flavenoids and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.

CLM What is claimed is:

. . . 5. The composition of claim 2 wherein the extract comprises less than about 15 by weight of the extract, of **ascorbic** acid.

. . . 6. The composition of claim 5 wherein the extract comprises less than about 10 by weight of the extract, of **ascorbic** acid.

L9 ANSWER 3 OF 29 USPATFULL

AN 2003:143072 USPATFULL
TI Substituted 4-amino-thiazol-2-yl compounds as cyclin-dependent kinase inhibitors
IN Chong, Wesley K. M., Encinitas, CA, United States
Chu, Shao Song, Encinitas, CA, United States
Li, Lin, San Diego, CA, United States
Duvadie, Rohit K., San Diego, CA, United States
Yang, Yi, San Diego, CA, United States
Xiao, Wei, San Diego, CA, United States
PA Agouron Pharmaceuticals Inc., San Diego, CA, United States (U.S. corporation)
PI US 6569878 B1 20030527
AI US 1998-179744 19981027 (9)
PRAI US 1997-63634P 19971027 (60)
US 1997-63666P 19971028 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner: Troung, Tamthom N.
LREP Zielinski, Bryan C., Reidy, Joseph F., Hsu, Wendy Lei
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 5747
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . see Webster, "The Therapeutic Potential of Targeting the Cell Cycle," Exp. Opin. Invest, Drugs, vol. 7 (1998), pp. 865-887). The **flavone** flavopiridol displays modest selectivity for inhibition of CDKs over other kinases, but inhibits CDK4, CDK2, and CDK1 equipotently, with IC.sub.50s. . .

SUMM . . . complexes. Preferred compositions of the invention contain cell-cycle control agents having an inhibition constant against CDK4 or a CDK4/D-type cyclin **complex** of about 1 .mu.M or less, more preferably of about 500 nM or less, even more preferably of about 200. . . Other preferred compositions of the invention contain cell-cycle control agents having an inhibition constant against CDK2 or a CDK2/E-type cyclin **complex** of about 1 .mu.M or less, more preferably of about 500 nM or less, even more preferably of about 200. . .

SUMM . . . benzoic acid, 2-acetoxybenzoic acid, acetic acid, phenylacetic acid, propionic acid, glycolic acid, stearic acid, lactic acid, malic acid, tartaric acid, **ascorbic** acid, maleic acid, hydroxymaleic acid, glutamic acid, salicylic acid, sulfanilic acid, and fumaric acid. Exemplary base-addition salts include those derived. . .

DETD . . . per reaction. Reactions were initiated with enzyme, incubated at 30.degree. C., and terminated after 20 minutes by the addition of **ethylenediaminetetraacetic** acid (EDTA) to 250 mM. The phosphorylated substrate was then captured on a nitrocellulose or phosphocellulose membrane using a 96-well. . .

DETD A **complex** of human CDK4 and cyclin D3, or a **complex** of cyclin D1 and a fusion protein of human CDK4 and gluathione-S-transferase (GST-CDK4), or a **complex** of human CDK4 and genetically truncated (1-264) cyclin D3, was purified using traditional biochemical chromatographic techniques from insect cells that. . . (see e.g., Meijer and Kim, "Chemical Inhibitors of Cyclin-Dependent Kinases," Methods in Enzymol,. vol. 283 (1997), pp. 113-128.). The enzyme **complex** (5 or 50 nM) was assayed with 0.3-0.5 .mu.g of purified recombinant retinoblastoma protein fragment (Rb) as a substrate. The. . . microfiltration on a nitrocellulose membrane and quantified using a phosphorimager as described above. For measurement of tight-binding inhibitors, the enzyme **complex** concentration was lowered to 5 nM, and the assay duration was extended to 60 minutes,

during which the time-dependence of. . .

DETD . . . and purified as described previously (Jeffrey et al., "Mechanism of CDK activation revealed by the structure of a cyclin A-CDK2 **complex**," Nature, vol. 376 (Jul. 27, 1995), pp. 313-320). Purified, proteolyzed cyclin A was included in the assay at a three- to five-fold molar excess to CDK2. Alternatively, a **complex** of CDK2 and proteolyzed cyclin A was prepared and purified by gel filtration. The substrate for this assay was the. . .

DETD The **complex** of human CDK1 (cdc2) and cyclin B was purchased from New England Biolabs (Beverly Mass.). Alternatively, a CDK1/glutathione-S-transferase-cyclin B1 **complex** was purified using glutathione affinity chromatography from insect cells that had been co-infected with the corresponding baculovirus expression vectors. The. . .

DETD . . . were lysed by the addition of 100 .mu.L lysis buffer (50 mM HEPES (pH 7.0), 250 mM NaCl, 5 mM **ethylenediaminetetraacetic** acid, 0.1% Nonidet P-40, 1 mM dithiothreitol, 2 mM sodium pyrophosphate, 1 mM sodium orthovanadate, 1 .mu.g/ml aprotonin, 1 .mu.g/ml. . .

CLM What is claimed is:

. . . 14. A pharmaceutical composition comprising: (a) an amount of a cell-cycle control agent effective to inhibit CDK4 or a CDK4/cyclin **complex**, said cell-cycle control agent being selected from the group consisting of: (i) a compound of the Formula I: ##STR519## wherein:. . .

15. A method of treating a disease or disorder mediated by inhibition of CDK4 or a CDK4/cyclin **complex**, comprising administering to a subject in need of such treatment a cell-cycle control agent selected from the group consisting of:. . .

17. A pharmaceutical composition comprising: (a) an effective amount for inhibiting a CDK or a CDK/cyclin **complex** of a cell-cycle control agent selected from: (i) compounds of the Formula I: ##STR523## wherein: R.sup.1 is selected from: ##STR524##. . .

L9 ANSWER 4 OF 29 USPATFULL

AN 2003:142822 USPATFULL

TI Compositions comprising organosiloxane resins for delivering oral care substances

IN Yue, Jiang, West Chester, OH, United States
Crisanti, Mark Matthew, Cincinnati, OH, United States
Majeti, Satyanarayana, Cincinnati, OH, United States
Burgess, Steven Carl, Sharonville, OH, United States
Reno, Elizabeth Ann, Fairfield, OH, United States
Li, Li, West Chester, OH, United States
Mitra, Shekhar, Indian Hill, OH, United States

PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)

PI US 6569408 B1 20030527
WO 2001001939 20010111

AI US 2001-19038 20011220 (10)
WO 2000-US15890 20000609

PRAI WO 2000-US9915130 20000702

DT Utility

FS GRANTED

EXNAM Primary Examiner: Rose, Shep K.

LREP Hiland, Evelyn L., Zea, Betty J.

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 975

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . a barrier coating may offer a benefit in terms of enhanced durability, it requires the use of special equipment and **complex**

application; thus, it cannot be performed at home and cannot be used for self-treatment.

SUMM . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .

SUMM . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.

SUMM . . . care substance. Additional components include, but are not limited to, flavoring agents, sweetening agents, xylitol, surfactants, and chelants such as **ethylenediaminetetraacetic** acid. Suitable flavoring agents include, but are not limited to, oil of peppermint, oil of sassafras, clove bud oil, peppermint,. . .

L9 ANSWER 5 OF 29 USPATFULL
AN 2003:119617 USPATFULL
TI Accelerators for increasing the rate of formation of free radicals and reactive oxygen species
IN Taylor, Kevin, Mason, OH, UNITED STATES
Mesaros, Jody, Mason, OH, UNITED STATES
PA Cavalier Discovery, Mason, OH (U.S. corporation)
PI US 2003082101 A1 20030501
AI US 2002-166038 A1 20020611 (10)
PRAI US 2001-296761P 20010611 (60)
DT Utility
FS APPLICATION
LREP BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 2700

SUMM . . . transition metal, and the reductant preferably has a reduction potential which permits reduction of the transition metal or transition metal **complex** to a lower oxidation number. Free radical production is also promoted by the chelating compounds, which maintain the iron in. . .

SUMM [0023] A new sonodynamic drug is presented where a reductant such as **ascorbic** acid is added to the diseased tissues. Upon application of ultrasound, iron from biological sources is mobilized and interacts with. . .

SUMM . . . these compounds are gallic acid, cumene hydroperoxide, endotoxins (e.g., LPS), baiclain, vitamins (K.sub.3, D and E), melatonin, bilirubin, N-(4-hydroxyphenyl)retinamide, beta-hematin, **flavone**, chalcone, chalconarigenin, naringenin, bleomycin, platinum derivatives (e.g., cisplatin), nitrogen and sulfur mustards, primaquine, manadione, a-tocopherol, .beta.-carotene, Trolox C, estrogen, androgens (e.g., 5-alhpa-DHT), 1,4-naphthoquinone-2-methyl-3-sulfonate, **ascorbic** acid gallic acid, captopril, enalapril, buthionine, sulfoximine, N-ethylmaleimide, and diazenedicarboxylic acid bis (N,N'-dimethylamide), heme and its degradation products (bile pigments). . .

SUMM . . . a metal: aminocarboxylates and their salts, derivatives, isomers, polymers, and iron coordination compounds. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production. This was demonstrated using the following aminocarboxylate chelants:

Ethylenediaminetetraacetic acid
Ethylene glycol-bis(2-aminoethyl)-N,N,N',N'-tetraacetic acid
Diaminocyclohexane-N,N,N',N'-tetraacetic acid
Nitriloacetic acid
N-(2-Hydroxyethyl)ethylenediamine-N,N',N'-triacetic acid
Diethylenetriaminepentaacetic acid
Picolinic acid

SUMM . . . metal. More preferably a ratio of 0.5:1 to 30:1 (chelant:iron) should be used. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production.

SUMM . . . In general, a 0.5:1 to 10:1 ratio of chelant to metal is preferred. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production. We demonstrated this using ADP.

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production (Lindqvist, (2001)).

SUMM . . . 10-dihydrosteffimycin B, 13213 RP, tetracycline ref. 7680, baumycin A2, baumycin A1, baumycin B1, baumycin B2, antibiotic MA 144S1, rhodomycin antibiotic **complex**, musettamycin, antibiotic MA 144L1, aclacinomycin B, antibiotic MA 144 Y, aclacinomycin A, antibiotic MA 144G1, antibiotic MA 144M1, antibiotic MA. . .

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production (Quinlan, (1998)).

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production.

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production.

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and/or thiols further increases radical production.

SUMM [0058] **Flavonoids** such as kaempferol, quercetin, and myricetin and sesquiterpenes such as gossypol and feralin are reducing agents and/or chelants that increase. . . as aminocarboxylates, hydroxycarboxylates, or biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Other examples of **flavonoids** include, but are not limited to acacetin, apigenin, biochanin-A, daidzein, equol, flavanone, **flavone**, formononetin, genistin, glabranin, liquiritigenin, luteolin, miroestrol, naringenin, naringin, phaseollin, phloretin, prunetin, robinin, and sophoricoside. Derivatives, polymers, and glycosylated forms of these compounds are also relevant. B-dihydroxy and B-trihydroxy **flavonoids** are preferred (Canada, (1990); Laughton, (1989)).

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid or thiols further increases radical production (Gutteridge, (1985); Gutteridge, et al. (1984); Morier-Teissier, et al. (1990)).

SUMM [0061] The following compounds increase free radical production when exposed to ultrasound and a metal: **ascorbic** acid, its derivatives, salts and polymers act as ultrasound enhanced reducing agents and/or chelants. Addition of a chelant such as. . .

SUMM . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and/or 1,4-anthraquinone derivatives.

SUMM [0069] In one embodiment, high levels of **ascorbic** acid are administered to a diseased body, followed by administration of liposomally or polymerically encapsulated Fe(II). Ultrasound is used to rupture the liposome or polymer capsule to release iron at the target tissue. **Ascorbic** acid acts as the reductant. Alternatively, **ascorbic** acid can be encapsulated alone or as part of the iron capsule and administered along with the iron.

SUMM . . . source, chelates with EDTA and remains soluble and able to generate free radicals and reactive oxygen species. The addition of **ascorbic** acid or thiols or sulfate or hydroxylated 1,4-naphthoquinones (either systemically or encapsulated) enhances the production of free radical and reactive. . .

DETD . . . X-ray imaging, the reporter is preferably a heavy atom (atomic number greater than 37), a chelated heavy metal ion or **complex** ion, or a particular substance such as a heavy metal compound, an insoluble iodinated organic compound, or a vesicle enclosing. . .

DETD [0104] Chelates are **complex** ions that involve ligands with two or more bonding sites.

DETD . . . Additional chelants can also be used, including hydroxyethyleniminodiacetate (HEIDA), gallate (GAL), hexaketocyclohexane, tetrahydroxy-1,4-quinone, gallic acid, rhodizonic acid, dipicolinic acid, alizarin, **ascorbic** acid, and picolinic acids. Other examples are given in U.S. Pat. Nos. 6,160,194 and 5,741,427, the entire contents of which are hereby incorporated by reference. **Flavonoids** can also be used as metal ion chelators which reduce the redox potential of metal ions.

DETD . . . metal back to the active form after it has participated in the radical producing reaction is thermodynamically favorable. For example, **ascorbic** acid has a standard reduction potential of -0.127V, and is therefore able to reduce Fe(III) to Fe(II), where the Fe(III)/Fe(II). . .

DETD . . . metal include aminocarboxylates and their salts, derivatives, isomers, polymers, and iron coordination compounds. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4-benzoquinone derivatives and 1,4-anthraquinone derivatives and/or thiols further increases free radical production. This was demonstrated using the. . .

DETD [0127] **Ethylenediaminetetraacetic** acid

DETD . . . 0.5:1 to about 100:1, a preferred ratio is about 0.5:1 to about 30:1. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4-benzoquinone derivatives, or 1,4-anthraquinone derivatives, and/or thiols used increase radical productions.

DETD . . . In general, a 0.5:1 to 10:1 ratio of chelant to metal is preferred. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production. We demonstrated this using ADP.

DETD . . . increases radical production, particularly when added to the

compounds listed in paragraph 0107. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production particularly when added to the. . .

DETD . . . 10-dihydrosteffimycin B, 13213 RP, tetracycline ref. 7680, baumycin A2, baumycin A1, baumycin B1, baumycin B2, antibiotic MA 144S1, rhodomycin antibiotic **complex**, musettamycin, antibiotic MA 144L1, aclacinomycin B! antibiotic MA 144 Y, aclacinomycin A, antibiotic MA 144G1, antibiotic MA 144M1, antibiotic MA. . .

DETD . . . increases radical production, particularly when added with a compound described in paragraph 0109. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production, particularly in combination with a. . .

DETD . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production.

DETD . . . further increases radical production, particularly when added with a compound as described above. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols further increases radical production especially in combination with a compound as described. . .

DETD . . . further increases radical production especially in combination with a compound as described above. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and/or thiols further increases radical production more particularly, when and in combination with a. . .

DETD [0154] **Flavonoids** such as kaempferol, quercetin, and myricetin and sesquiterpenes such as gossypol and feralin are reducing agents and/or chelants that increase. . . as aminocarboxylates, hydroxycarboxylates, or biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Other examples of **flavonoids** include, but are not limited to acacetin, apigenin, biochanin-A, daidzein, equol, flavanone, **flavone**, formononetin, genistin, glabranin, liquiritigenin, luteolin, miroestrol, naringenin, naringin, phaseollin, phloretin, prunetin, robinin, and sophoricoside. Derivatives, polymers, and glycosylated forms of these compounds are also relevant. B-dihydroxy and B-trihydroxy **flavonoids** are preferred (Canada (1990); Laughton. (1989)).

DETD . . . chelants such as aminocarboxylates, hydroxycarboxylates, or biologically relevant chelants such as ADP, ATP, or GTP, or reducing agents such as **ascorbic** acid or thiols (Gutteridge, et al. (1985); Gutteridge, et al. (1984); Morier-Teissier, et al. (1990)).

DETD [0157] The following compounds increase free radical production when exposed to ultrasound and a metal: **ascorbic** acid, its derivatives, salts and polymers act as ultrasound enhanced reducing agents and/or chelants. Addition of a chelant such as. . .

DETD . . . biologically relevant chelants such as ADP, ATP, or GTP further increases radical production. Addition of a reducing agent such as **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and/or 1,4-anthraquinone derivatives.

DETD . . . following equation: ##EQU1##

Results:

Chelant	% Ultrasound Mediated Activity vs Control

No chelant	19%
Desferrioxamine mesylate	92%
Nitriloacetic acid	69%
Ethylenediaminetetraacetic acid	64%
Diaminocyclohexane-N,N,N',N'-tetraacetic acid	61%
N-(2-Hydroxyethyl)ethylenediamine-N,N',N'-triacetic acid	34%
Ethylene glycol-bis(2-aminoethyl)-N,N,N',N'-tetraacetic acid	29%

DETD . . . versus the control solution using the following equation:
##EQU2##

Results:

Chelant	% Ultrasound Mediated Activity vs Control
No chelant	0%
Ethylenediaminetetraacetic acid	575%
Ethylene glycol-bis(2-aminoethyl)-N,N,N',N'-tetraacetic acid	520%
Diaminocyclohexane-N,N,N',N'-tetraacetic acid	446%
Nitriloacetic acid	238%
N-(2-Hydroxyethyl)ethylenediamine-N,N',N'-triacetic acid	224%

. . .
DETD . . . Chelant:Iron Ratio

Chelant	for Optimum Ultrasound Mediated Activity vs Control
Desferrioxamine mesylate	1:1 to 1:10
Nitriloacetic acid	1:1 to 1:10
Ethylenediaminetetraacetic acid	1:1 to 1:10
Diaminocyclohexane-N,N,N',N' - tetraacetic acid	1:1 to 1:10
N-(2-Hydroxyethyl)ethylenediamine-N,N',N'-triacetic acid	1:1 to 1:10
Ethylene glycol-bis(2-. . .	

DETD . . . Additive

	Control
No additive	<20%
Gossypol (0.075 mM)	>100%
Quercetin (0.075 mM)	>100%
Myricetin (0.075 mM)	>100%

Addition of 0.075 mM **ascorbate** or cysteine significantly increased radical production in the sonicated versus control solution.

DETD [0255] Canada, A. The production of reactive oxygen species by dietart **flavonols**. Free Radical Biology & Medicine. Vol 9. pp441-449 (1990).

DETD [0281] Schneider, J. E. **Ascorbate**/iron mediation of hydroxyl free radical damage to PBR322 plasmid DNA. Free Radical Biology & Medicine. Vol 5 pp287-295 (1988).

CLM What is claimed is:
29. The method according to claim 27 wherein the reducing agent is oxidized **ascorbic** acid.

31. The method according to claim 15 wherein the activator is a combination of iron and **ascorbic** acid and at least one of the activators is encapsulated in a material which is destroyed by contact with ultrasound.

. . .

. . . exposed to ultrasound and a metal, including adenosine diphosphate (ADP), adenosine triphosphate (ATP) and guanosine triphosphate (GTP), reducing agents including **ascorbic** acid, 1,4-naphthoquinone derivatives, 1,4 benzoquinone derivatives, and 1,4-anthraquinone derivatives and/or thiols, phosphonoformic acid, phosphonoacetic acid, and pyrophosphate, biological chelants including. . . chryso-obtusin, chrysophanic acid 9-anthrone, digiferrugineol, 1,4-dihydroxy-2-methylanthraquinone, frangulin A, frangulin B, lucidin, morindone, norobtusifolin, obtusifolin, physcion, pseudopurpurin, purpurin, danthron, and rubiadin; **flavonoids** including kaempferol, quercetin, and myricetin and sesquiterpenes including gossypol and feralin, cacetin, apigenin, biochanin-A, daidzein, equol, flavanone, **flavone**, formononetin, genistin, glabranin, liquiritigenin, luteolin, miroestrol, naringenin, naringin, phaseollin, phloretin, prunetin, robinin, and sophoricoside, derivatives, polymers, and glycosylated forms thereof;. . .

L9 ANSWER 6 OF 29 USPATFULL
AN 2003:113608 USPATFULL
TI Cross-linked polymer and process for producing the same, absorptive structure and absorptive article
IN Tagawa, Daisuke, Kyoto-shi, JAPAN
Asai, Tatsuya, Kyoto-shi, JAPAN
Iwasaki, Yoshiyuki, Kyoto-shi, JAPAN
Ota, Yoshihisa, Kyoto-shi, JAPAN
Tanaka, Keiji, Kyoto-shi, JAPAN
PI US 2003078349 A1 20030424
AI US 2002-272393 A1 20021015 (10)
RLI Continuation of Ser. No. WO 2001-JP3138, filed on 11 Apr 2001, UNKNOWN
PRAI JP 2000-111703 20000413
JP 2000-111747 20000413
JP 2001-73606 20010315
DT Utility
FS APPLICATION
LREP Howard M. Petere, PETERS, VERNY, JONES & SCHMITT LLP, 385 Sherman Avenue, Suite 6, Palo Alto, CA, 94306
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1859
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . of a reducing agent such as sulfite or bisulfite of alkali metals, ammonium sulfite, ammonium bisulfite, ferric chloride, ferric sulfate, **ascorbic** acid and the like and an oxidizing agent such as persulfate of alkali metals, ammonium persulfate, hydrogen peroxide, organic peroxide. . .
SUMM [0063] {circle over (3)} Polymerization is performed in the presence of a **complex** compound (d) of a metal element (d1) and a ligand (d2) of an anion or a neutral molecule.
SUMM [0065] The **complex** compound (d) is a **complex**

compound of a metal element (d1) and a ligand (d2) of an anion or a neutral molecule, and has the. . .

SUMM . . . acid, phthalic acid, nicotinic acid, picolinic acid, aspartic acid, benzoylpyruvic acid, ethylenediamine diacetic acid, nitrilotriacetic acid, N'-(2-hydroxyethyl)ethylenediaminetriacetic acid, propylenediaminetetraacetic acid, **ethylenediaminetetraacetic** acid, trans-1,2-cyclohexanediaminetetraacetic acid, trans-1,2-(cyclohexanedinitrilo)tetraacetic acid, (1,2-ethanediyldinitrilo)tetraacetic acid, ethylenediaminetetrapropionic acid, glycine, N-methylglycine, glycylglycine, glycylglycylglycylglycine, salicylideneglycine, iminodiacid, methyliminodiacetic acid, N,N-diethyldiselenocarbamic acid, methionine,. . .

SUMM [0099] The **complex** compound (d) can be usually synthesized by mixing a salt of a metal element (d1) (for example, a haloid of. . . metal etc.) and a ligand (d2) of an anion or a neutral molecule at room temperature. Alternatively, after other intermediate **complex** compound is formed, an end **complex** compound is made in some cases. The salt of a metal element (d1) and a ligand (d2) of an anion. . . to 200.degree. C. When a substance to be removed is produced, it can be removed under reduced pressure. The produced **complex** compound (d) may be taken out as it is or as crystals, and may be used by purification. Examples of. . .

SUMM [0100] There are so many **complex** compounds (d) and individual methods for synthesis are described, for example, in Angew.Chem.Int.Ed.Engl., 12,57(1973); J.Chem.Educ., 50,343(1973); Accts. Chem. Research, 3,. . .

SUMM . . . coordination (an example of a ligand is ethylenediamine), and polydentate (tri-hexa-dentate) (an example of a ligand is terpyridine). Usually, the **complex** compound takes the form of coordination of a combination of them. The **complex** compound (d) is usually a non-electrolytic **complex** compound having no charge but may be an electroltic **complex** compound such as a **complex** cation, a **complex** anion and the like having charge.

SUMM [0102] Examples of the **complex** compound (d) are as follows:

SUMM [0111] The **complex** compound is not particularly limited and the compounds in the aforementioned range can be applied.

SUMM [0112] Preferred are **complex** compounds having the Fifth Period VIII group metal element (ruthenium, rhodium, palladium) and a ligand selected from the group consisting. . .

SUMM [0113] It is preferable from a viewpoint of the polymerizability and operability that a **complex** compound (d) is a **complex** compound which dissolves in water or a water-soluble organic solvent. Examples of the water-soluble organic solvent include the same water-soluble organic solvents as those used for synthesis of the **complex** compound (d).

SUMM [0114] Preferably, an amount of a **complex** compound (d) is 0.005 ppm to 2% by weight and an amount of a metal element (d1) is 0.001 ppm to 1% by weight and, more preferably, an amount of a **complex** compound (d) is 0.01 ppm to 1% by weight and an amount of a metal element (d1) is 0.005 ppm to 0.5% by weight and, particularly preferably, an amount of a **complex** compound (d) is 0.02 ppm to 0.6% by weight and an amount of a metal element (d1) is 0.01 ppm. . .

SUMM [0115] When an amount of the **complex** compound (d) is 0.005 ppm to 2% by weight and an amount of (d1) is 0.001 ppm to 1% by. . .

SUMM [0116] When the solubility of the **complex** compound (d) in an aqueous polymerization solution is low, polymerization may be performed by dissolving or dispersing the **complex** compound in an aqueous polymerization solution of the aforementioned vinyl series monomer (a) using a water-soluble organic solvent, a surfactant. . .

SUMM . . . is 45% by weight or less, a molecular weight of a polymer obtained in the case of use of the **complex** compound (d) does

not become low, side reactions such as self cross-linking and the like do not occur and, whereby,. . .

SUMM . . . as musk, abietic oil and turpentine oil, synthetic perfume such as menthol, citral, p-methylacetophenone and floral), a deodorant (zeolite, silica, **flavonoid** and cyclodextrin), an inorganic powder and an organic fibrous substance and the like can be added at an arbitral stage. . .

DETD . . . to 1 ppm or less, 0.3 g of a 1% aqueous hydrogen peroxide solution, 0.8 g of a 0.2% aqueous **ascorbic** acid solution and 0.8 g of a 2% aqueous 2,2'-azobis(2-amidinopropane) dihydrochloride solution were added to mix to initiate polymerization, a. . .

DETD . . . to 1 ppm or less, 0.3 g of a 1% aqueous hydrogen peroxide solution, 0.8 g of a 0.2% aqueous **ascorbic** acid solution and 0.8 g of a 2% aqueous 2,2'-azobis(2-amidinopropane) dihydrochloride solution were added to mix to initiate polymerization, a. . .

DETD . . . to 1 ppm or less, 0.3 g of a 1% aqueous hydrogen peroxide solution, 0.8 g of a 0.2% aqueous **ascorbic** acid solution and 0.8 g of a 2% aqueous 2,2'-azobis(2-amidinopropane) dihydrochloride solution were added to mix to initiate polymerization, a. . .

DETD . . . to 1 ppm or less, 0.3 g of a 1% aqueous hydrogen peroxide solution, 0.8 g of a 0.2% aqueous **ascorbic** acid solution and 0.8 g of a 2% aqueous 2,2'-azobis(2-amidinopropane) dihydrochloride solution were added to mix to initiate polymerization, a. . .

DETD . . . to 0.3 ppm or less, 1 g of a 1% aqueous hydrogen peroxide solution, 1.2 g of a 0.2% aqueous **ascorbic** acid solution and 2.8 g of a 2% aqueous 2,2'-azobis(2-amidinopropane) dihydrochloride solution were added to mix to initiate polymerization, a. . .

DETD . . . to 0.3 ppm or less, 1 g of a 1% aqueous hydrogen peroxide solution, 1.2 g of a 0.2% aqueous **ascorbic** acid solution and 0.8 g of a 2% aqueous 2,2'-azobis(2-amidinopropane) dihydrochloride solution were added to mix to initiate polymerization, a. . .

CLM What is claimed is:

. . . . cross-linked polymer according to claim 1, wherein said cross-linked polymer (A) is obtained by polymerization in the presence of a **complex** compound (d) of a metal element (d1) and a ligand (d2) of an anion or a neutral molecule.

12. The cross-linked polymer according to claim 10, wherein an amount of the **complex** compound (d) is 0.005 ppm to 2% by weight and amount of said metal element (d1) is 0.001 ppm to. . .

. . . . The process for producing a cross-linked polymer according to claim 17, wherein polymerization is performed in the presence of said **complex** compound (d) of said metal element (d1) and said ligand (d2) of an anion or a neutral molecule.

L9 ANSWER 7 OF 29 USPATFULL
AN 2003:105930 USPATFULL
TI Polybutene containing chewing gum and confection
IN Rajaiah, Jayanth, Loveland, OH, UNITED STATES
Ernst, Lisa Catron, Cincinnati, OH, UNITED STATES
Case, Ann Maria, Cincinnati, OH, UNITED STATES
Ha, Thinh Nguyen, Cincinnati, OH, UNITED STATES
Glandorf, William Michael, Mason, OH, UNITED STATES
Mayer, Christopher Robert, Cincinnati, OH, UNITED STATES
PA The Procter & Gamble Campany (U.S. corporation)
PI US 2003072841 A1 20030417
AI US 2002-84897 A1 20020228 (10)
PRAI US 2001-276975P 20010319 (60)
US 2001-276978P 20010319 (60)
DT Utility
FS APPLICATION

LREP THE PROCTER & GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION, WINTON HILL TECHNICAL CENTER - BOX 161, 6110 CENTER HILL AVENUE, CINCINNATI, OH, 45224
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1320
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . humectants, viscosity modifiers, thickeners, xylitol, alkali metal bicarbonate salts, buffering agents, surfactants, opacifiers such as titanium dioxide, chelants such as **ethylenediaminetetraacetic** acid, and mixtures thereof.
SUMM . . . .COPYRGT. 1996 by Marcel Dekker, Inc. Antioxidants useful in the present invention include, but are not limited to, Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.
DETD . . . 81% 81% 81% 80% 56% 80% 81% 100%
Sodium Percarbonate 19% 19% 19%
Urea Peroxide 19%
Calcium Peroxide 19%
Silica 1%
Petrolatum 25%
Benzocaine 20%
(Polyvinyl-Pyrrolidone) 19%
Peroxide **Complex**

Examples 34-37

Ingredients	Ex. 34	Ex. 35	Ex. 36	Ex. 37
Polybutene.sup.6	63.76%	54.5%	60.5%	61.5%
Petrolatum	10.00%	12.5%	12.5%	12.5%

. . .

L9 ANSWER 8 OF 29 USPATFULL
AN 2003:89152 USPATFULL
TI Method for treating wood with a metal-containing treating agent and wood treated thereby
IN Tanaka, Keijitsu, Chiba, JAPAN
Aoki, Hirobumi, Chiba, JAPAN
Echigo, Takashi, Chiba, JAPAN
PA SDS Biotech K.K., Tokyo, JAPAN (non-U.S. corporation)
PI US 6541038 B1 20030401
WO 9926767 19990603
AI US 2000-555143 20000525 (9)
WO 1998-JP4790 19981022
PRAI JP 1997-348070 19971217
JP 1997-324254 19971126
US 1998-77314P 19980309 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Pak, John
LREP Sughrue Mion, PLLC
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 1761

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . agent for cellulose-based materials that is composed of an anti-organism agent containing a metal ion capable of forming an ammine **complex** and a hydroxyalkylamine to which is added an aliphatic monocarboxylic acid having 6 to 12 carbon atoms. This is to. . .

SUMM . . . The method for treating wood according to item 9, wherein the polyphenol oxidizing catalyst is catechol oxidase, laccase, polyphenol oxidase, **ascorbic** acid oxidase, bilirubin oxidase or peroxidase.

SUMM . . . crosslinking reaction. For example, compound listed below can be used, such as quercetin, rutin, o-hydroxybenzoic acid, p-hydroxybenzoic acid, guaiacol, 4-methoxyphenol, **ascorbic** acid, isoascorbic acid, biphenol, bisphenol A, 3,5,3',5'-tetrahydroxymethylbisphenol A, 4,4'-ethylenedianiline, methylhydroquinone, ethylhydroquinone, 1-hydroxybenzotriazole, 6-hydroxy-2,4,5-triaminopyrimidine, 4,5,6-triaminopyrimidine, 2,3-dihydroxypyridazine, 3,6-dihydroxypyridazine, 2,3-dihydroxypyridine, methyl-4-hydroxy-3-methoxybenzoic acid, 4,5-diamino-6-hydroxy-2-mercaptopyrimidine,. . .

SUMM . . . analogs such as aspartic acid, glutamic acid, glycine, 2-aminoisobutyric acid, and .beta.-alanine, aminopolyacetic acid such as iminodiacetic acid, nitrilotriacetic acid, **ethylenediaminetetraacetic** acid, and diethylenetriaminepentaacetic acid, polymeric electrolytes such as polyacrylic acid, polyitaconic acid, polymaleic acid, maleic anhydride copolymer, and carboxymethylcellulose, non-dissociating. . .

SUMM Further, to effectively fix the metal produced from the above metal compound or metal chelate **complex** by oxidation-reduction reaction to the inside of wood by the method for treating wood according to the present invention, it is preferred that a metal compound or metal chelate **complex** containing in particular copper or silver be used.

SUMM . . . or metal complexes, fine powder of a metal, or fine powder of a sparingly water-soluble metal compound or metal chelate **complex** can also be used for the purpose of the present invention. Such a fine powder may be composed of fine. . .

SUMM . . . the metal complexes, artificial enzymes imitating oxidoreductase enables one to obtain effective catalytic effect by use of a metal chelate **complex** in a lower concentration and is useful for the purpose of the present invention. Specific examples of such an artificial. . .

SUMM . . . metal complexes having highsafety. Examples of such an enzyme include polyphenol oxidizing enzymes such as catechol oxidase, laccase, polyphenol oxidase, **ascorbic** acid oxidase, or bilirubin oxidase produced by microorganisms, for example, fungi or bacteria, or plants. In particular, when it is. . .

SUMM Upon mixing the first and second agents, formation of a **complex** between the metal component and the lignin component and oxidation reaction of the lignin component will start. At this time,. . . agent components are concentrated and exposed to oxygen, thereby accelerating a series of the above reactions. As a result, a **complex** of the product by the oxidation and/or macromolecularization reaction of lignin component with the metal compound and/or metal ion is. . .

SUMM . . . that has an ability of solubilizing metals and usually is a basic organic compound that forms a salt or chelating **complex** with a metal ion and is an amine or imine having at least one hydroxyl group in the molecule, or. . .

SUMM . . . macromolecularization reaction proceeds. In the case where no polyphenol oxidizing catalyst is used, or in the case where a metal **complex** or artificial enzyme is used, generally, the oxidation reaction proceeds more rapidly in alkaline condition. However, in the case where. . .

SUMM . . . the oxidation reaction and/or macromolecularization reaction after the impregnation can effectively fix the treating agent components. In the wood, lignin, **flavonoids** and the like substances, on which the catalyst having polyphenol oxidizing effect can act, already exist in a fixed state. . .

DETD . . . to carry out leaching operation. Then, the water after the leaching operation (leached solution) was subjected to formation of a **complex** with PAN (1-(2-pyridylazo)-2-naphthol, obtained from Aldrich Chemical Company), and absorption analysis of leached copper ion amount was conducted. Taking the. . .

CLM What is claimed:

. . . The method for treating wood according to claim 8, wherein the polyphenol oxidizing catalyst is catechol oxidase, laccase, polyphenol oxidase, **ascorbic** acid oxidase, bilirubin oxidase or peroxidase.

L9 ANSWER 9 OF 29 USPATFULL

AN 2002:322572 USPATFULL

TI Methods to measure lipid antioxidant activity

IN Aldini, Giancarlo, Milan, ITALY
Yeum, Kyung-Jin, Winchester, MA, UNITED STATES

PA TRUSTEES OF TUFTS COLLEGE (non-U.S. corporation)

PI US 2002182736 A1 20021205

AI US 2002-114181 A1 20020402 (10)

PRAI US 2001-280920P 20010402 (60)

DT Utility

FS APPLICATION

LREP NUTTER MCCLENNEN & FISH LLP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02210-2604

CLMN Number of Claims: 43

ECL Exemplary Claim: 1

DRWN 14 Drawing Page(s)

LN.CNT 2200

SUMM . . . be incubated with a hydrophilic radical generator that includes, but is not limited to, an azo radical generator, 2,2'-azobis[2-(5-methyl-2-imidazolin-2-yl)propane]dihydrochloride, iron, **ascorbic** acid and metal ions. In one embodiment, the hydrophilic radical generator is an azo radical generator selected from the group. . .

SUMM . . . capacity in aqueous compartment can be determined statistically from the data obtained by analyses of water-soluble antioxidant levels, such as **ascorbic** acid, uric acid and water-soluble **flavonoids** (catechin, epigallocatechin gallate etc.), and hydrophilic antioxidant capacity in a large population of healthy individuals.

SUMM [0024] In one embodiment, at least one aqueous antioxidant is administered, e.g., **ascorbic** acid. In another embodiment, a combination of aqueous antioxidants are administered, e.g., **ascorbic** acid and water-soluble polyphenols such as catechins, isoflavones, and procyanidins. Uric acid may be increased by ingesting uric acid containing food, and polyphenols. In yet another embodiment, at least one aqueous antioxidant e.g., **ascorbic** acid and at least one lipid antioxidant, e.g., .alpha.-tocopherol are administered. In yet another embodiment, a combination of aqueous antioxidants e.g., **ascorbic** acid and water-soluble polyphenols such as catechins, isoflavones, and procyanidins, and **ascorbic** acid and combination of lipid antioxidants, e.g., .alpha.-tocopherol and .beta.-carotene are administered.

DRWD [0028] FIG. 1 is a graph comparing the effects of AAPH and MeO-AMVN on the levels of the hydrophilic antioxidants **ascorbic** acid (AA) and uric acid (UA) in human plasma over time;

DETD . . . retinol, and retinyl palmitate) and fat-soluble polyphenols such as quercetin. Examples of aqueous antioxidants include, but are not limited to, **ascorbic** acid and its oxidized form, "dehydroascorbic acid", uric acid and its oxidized form, "allantoin", bilirubin, albumin and vitamin C and. . .

DETD . . . steroids, eicosanoids, waxes, and fat-soluble vitamins. Some lipids may be generally classified into two groups, the simple lipids and the **complex** lipids. By way of non-limiting example, simple lipids include triglycerides or fats and oils, which are fatty acid esters of. . . esters of long-chain alcohols, and steroids such as cholesterol and ergosterol, which are derived from partially or completely derived pheanthrene. **Complex** lipids include, for example, phosphatides or phospholipids, which are lipids that contain phosphorous, glycolipids, which are lipids that contain carbohydrate. . .

DETD . . . 2,2'-azobis (2-methylproprionate) (DAMP), and 2,2'-azobis-(2-amidinopropane). Examples of hydrophilic azo radical generators include, but are not limited to, 2,2'-azobis[2-(5-methyl-2-imidazolin-2 yl)propane]dihydrochloride, iron, **ascorbic** acid and metal ions.

DETD . . . steroids, eicosanoids, waxes, and fat-soluble vitamins. Some lipids may be generally classified into two groups, the simple lipids and the **complex** lipids. By way of non-limiting example, simple lipids include triglycerides or fats and oils, which are fatty acid esters of. . . esters of long-chain alcohols, and steroids such as cholesterol and ergosterol, which are derived from partially or completely derived pheanthrene. **Complex** lipids include, for example, phosphatides or phospholipids, which are lipids that contain phosphorous, glycolipids, which are lipids that contain carbohydrate. . .

DETD [0099] Examples of aqueous antioxidants include, but are not limited to, **ascorbic** acid and its oxidized form, "dehydroascorbic acid", uric acid and its oxidized form, "allantoin," bilirubin, albumin, vitamin C, and water-soluble. . .

DETD . . . New York (1990)). It is likely that vitamin A acts at the promotion or progression phase of carcinogenesis. Vitamin C (**ascorbic** acid) may also act as an antioxidant by preventing nitrosamine formation in the stomach and reducing fecal mutagenicity. Vitamin E. . .

DETD . . . form suitable for topical application. For example, as a lotion, aqueous or aqueous-alcoholic gels, vesicle dispersions or as simple or **complex** emulsions (O/W, W/O, O/W/O or W/O/W emulsions), liquid, semi-liquid or solid consistency, such as milks, creams, gels, cream-gels, pastes and. . .

DETD [0132] After an overnight fast (10-12 h), blood from two healthy donors (32 and 35 years old) was collected in **ethylenediaminetetraacetic** * acid (EDTA)-containing tubes. In order to reduce the variability of different donors, blood samples from these two subjects were collected. . .

DETD **[0139] The major water-soluble antioxidants (** ***ascorbic** acid and uric acid) were measured at 5 min, 15 min, 30 min, 1 hr, 2 hr, 3 hr and 4 hr. For water-soluble antioxidant measurement, the mixtures were immediately deproteinized with perchloric acid (250 mM). **Ascorbic** acid and uric acid in plasma was analyzed by HPLC using an electrochemical detector (Bioanalytical System, Inc, N. Lafayette, Ind.). . .

DETD [0155] The results of the study show that the major hydrophilic (**ascorbic** acid and uric acid) and lipophilic (.alpha.-tocopherol and .beta.-carotene) plasma antioxidants were consumed in a time-dependent manner in the presence. . .

DETD . . . UA (.quadrature.); MeO-AMVN (2 mM): AA (.circle-solid.), UA (.smallcircle.). Values are mean.+-.SD of three independent experiments.

The initial concentrations of **ascorbic** acid (AA) and uric acid (UA) were respectively 48 .mu.M and 220 .mu.M. The azo-compounds were added to plasma samples. . . concentration of AA and UA assayed by HPLC as described in the text. The results from FIG. 1 show that **ascorbic** acid and uric acid were completely consumed within 15 min and 180 min, respectively using 20 mM AAPH. The consumption of these antioxidants was significantly slower in the presence of 2 mM MeO-AMVN since total disappearance of **ascorbic** acid and uric acid was observed after 30 min and 300 min, respectively.

DETD . . . min of incubation. The rate of consumption was significantly lower at 1 mM MeO-AMVN. In contrast to the consumption of **ascorbic** acid, uric acid and .alpha.-tocopherol, the kinetics of .beta.-carotene depletion was faster in the presence of 2 mM MeO-AMVN as. . .

DETD [0159] In the presence of AAPH (20 mM), the following order of disappearance of antioxidants was observed: **ascorbic** acid>.alpha.-tocopherol>uric acid and .beta.-carotene indicating a gradient of peroxyl radicals from the aqueous to the lipid phase. **Ascorbic** acid could effectively trap hydrophilic peroxyl radicals in the aqueous phase of plasma before they are able to diffuse into. . . in health and disease. New York: Marcel Dekker Inc.; 1993:131-139). Similar consumptions of uric acid and .beta.-carotene indicate that once **ascorbic** acid has been completely consumed, the remaining water-soluble antioxidants provide only a partial trap for the aqueous peroxyl radicals, which. . .

DETD [0160] When MeO-AMVN (2 mM), was used as the radical inducer, the order of disappearance was partially reversed with .alpha.-tocopherol.congruent.**ascorbic** acid>.beta.-carotene>>uric acid. .beta.-carotene was consumed earlier than uric acid and almost at the same time as .alpha.-tocopherol, reflecting the diffusion and activation of MeO-AMVN in the lipophilic phase. The consumption of **ascorbic** acid by the lipophilic radical inducer, MeO-AMVN, suggests that **ascorbic** acid can repair the .alpha.-tocopheroxyl radical thereby regenerating .alpha.-tocopherol, and permitting it to function again as a free radical chain-breaking. . .

DETD . . . 90 min with 20 mM AAPH and at 180 min with 10 mM AAPH, corresponding to the depletion of both **ascorbic** acid and uric acid (FIG. 1). MeO-AMVN (2 mM) induced the propagation phase only after 270 min of incubation. No. . .

DETD . . . as radical generator, the aqueous oxidation started after a lag phase of 120 min, corresponding to the depletion of both **ascorbic** acid and uric acid (Aldini et al., Free Rad. Biol. Med. 31(9): 1043-1050 (2001)). EGCG addition reduced the oxidative process. . .

DETD . . . hydrophilic and lipophilic plasma endogenous antioxidants consumption, plasma was incubated with EGCG. When 20 mM AAPH was added to plasma, **ascorbic** acid and uric acid were almost totally consumed respectively within 15 and 180 min. EGCG at all the concentrations tested. . .

DETD . . . antioxidants depletion. By contrast, EGCG was ineffective (up to 10 .mu.M) to spare the main hydrophilic endogenous antioxidants such as **ascorbic** acid (AA) and uric acid (UA). As reported by Lolito et al. (Lolito et al., Proc Soc Exp Biol Med. . .

DETD . . . significant at 2 .mu.M (% inhibition of ESR signal=8.+-.1.3%) to reach an almost complete disappearance at 25 .mu.M (IC.sub.50=12.1 .mu.M). **Ascorbic** acid, the physiological recycling agent of .alpha.-tocopherol showed an IC.sub.50=14.2 EGCG dose-dependently reduced the AAPH induced consumption of the lipophilic. . . antioxidants depletion. By contrast, EGCG was ineffective (up to 10 .mu.M) to spare the main hydrophilic endogenous antioxidants such as **ascorbic** acid and uric acid. Although less than in the aqueous compartment, EGCG was found to dose-dependently inhibit the oxidative

damage. . .
CLM What is claimed is:
. . . radical generator further comprises selecting a hydrophilic radical generator selected from the group consisting of azo radical generator, 2,2'-azobis[2-(5-methyl-2-imidazolin-2-yl)propane]dihydrochloride, iron, **ascorbic** acid and metal ions.

L9 ANSWER 10 OF 29 USPATFULL
AN 2002:280065 USPATFULL
TI 32624, a novel human UDP-glucuronosyl and glycosyl transferase family member and uses thereof
IN Leiby, Kevin R., Natick, MA, UNITED STATES
PI US 2002155499 A1 20021024
AI US 2001-962678 A1 20010925 (9)
PRAI US 2000-235044P 20000925 (60)
DT Utility
FS APPLICATION
LREP LOUIS MYERS, FISH & RICHARDSON P.C., 225 Franklin Street, Boston, MA, 02110-2804
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 5149
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD . . . acid, metabolite, drug, toxin, carcinogen, or lipid substrates. Examples of other substrates include, but are not limited to, dietary amines, **flavones**, phenols, and bilirubin.
DETD . . . cystic diseases of renal medulla, which include, but are not limited to, medullary sponge kidney, and nephronophthisis-uremic medullary cystic disease **complex**, acquired (dialysis-associated) cystic disease, such as simple cysts; glomerular diseases including pathologies of glomerular injury that include, but are not limited to, in situ immune **complex** deposition, that includes, but is not limited to, anti-GBM nephritis, Heymann nephritis, and antibodies against planted antigens, circulating immune **complex** nephritis, antibodies to glomerular cells, cell-mediated immunity in glomerulonephritis, activation of alternative complement pathway, epithelial cell injury, and pathologies involving. . .
DETD . . . with the subject 32624 polypeptide; and evaluating ability of the compound to interact with, e.g., to bind or form a **complex** with the subject 32624 polypeptide. This method can be performed in vitro, e.g., in a cell free system, or in. . .
DETD . . . of the compound, e.g., the substrate, to 32624 can be determined by detecting the labeled compound, e.g., substrate, in a **complex**. Alternatively, 32624 could be coupled with a radioisotope or enzymatic label to monitor the ability of a test compound to modulate 32624 binding to a 32624 substrate in a **complex**. For example, compounds (e.g., 32624 substrates) can be labeled with .sup.125I, .sup.35S, .sup.14C, or .sup.3H, either directly or indirectly, and. . .
DETD . . . compound under conditions and for a time sufficient to allow the two components to interact and bind, thus forming a **complex** that can be removed and/or detected.
DETD . . . the test compound and either the non-adsorbed target protein or 32624 protein, and the mixture incubated under conditions conducive to **complex** formation (e.g., at physiological conditions for salt and pH). Following incubation, the beads or microtiter plate wells are washed to remove any unbound components, the matrix immobilized in the case of beads, **complex** determined either directly or indirectly, for example, as described above. Alternatively, the complexes can be dissociated from the matrix, and. . .

DETD . . . Further, fluorescence energy transfer may also be conveniently utilized, as described herein, to detect binding without further purification of the **complex** from solution.

DETD . . . and the binding partner is prepared, under conditions and for a time sufficient, to allow the two products to form **complex**. In order to test an inhibitory agent, the reaction mixture is provided in the presence and absence of the test. . . complexes between the target gene product and the cellular or extracellular binding partner is then detected. The formation of a **complex** in the control reaction, but not in the reaction mixture containing the test compound, indicates that the compound interferes with the interaction of the target gene product and the interactive binding partner. Additionally, **complex** formation within reaction mixtures containing the test compound and normal target gene product can also be compared to **complex** formation within reaction mixtures containing the test compound and mutant target gene product. This comparison can be important in those. . .

DETD . . . test compounds that disrupt preformed complexes, e.g., compounds with higher binding constants that displace one of the components from the **complex**, can be tested by adding the test compound to the reaction mixture after complexes have been formed. The various formats. . .

DETD . . . labeled with, e.g., a labeled anti-Ig antibody). Depending upon the order of addition of reaction components, test compounds that inhibit **complex** formation or that disrupt preformed complexes can be detected.

DETD . . . detect anchored complexes. Again, depending upon the order of addition of reactants to the liquid phase, test compounds that inhibit **complex** or that disrupt preformed complexes can be identified.

DETD [0261] In an alternate embodiment of the invention, a homogeneous assay can be used. For example, a preformed **complex** of the target gene product and the interactive cellular or extracellular binding partner product is prepared in that either the. . . target gene products or their binding partners are labeled, but the signal generated by the label is quenched due to **complex** formation (see, e.g., U.S. Pat. No. 4,109,496 that utilizes this approach for immunoassays). The addition of a test substance that competes with and displaces one of the species from the preformed **complex** will result in the generation of a signal above background. In this way, test substances that disrupt target gene product-binding. . .

DETD . . . to the activator domain.) If the "bait" and the "prey" proteins are able to interact, in vivo, forming a 32624-dependent **complex** , the DNA-binding and activation domains of the transcription factor are brought into close proximity. This proximity allows transcription of a. . .

DETD . . . glycols, glycerine, propylene glycol or other synthetic solvents; antibacterial agents such as benzyl alcohol or methyl parabens; antioxidants such as **ascorbic** acid or sodium bisulfite; chelating agents such as **ethylenediaminetetraacetic** acid; buffers such as acetates, citrates or phosphates and agents for the adjustment of tonicity such as sodium chloride or. . .

DETD . . . Prevention of the action of microorganisms can be achieved by various antibacterial and antifungal agents, for example, parabens, chlorobutanol, phenol, **ascorbic** acid, thimerosal, and the like. In many cases, it will be preferable to include isotonic agents, for example, sugars, polyalcohols. . .

L9 ANSWER 11 OF 29 USPATFULL

AN 2002:272486 USPATFULL

TI Use of folic acid and/or derivatives thereof for the preparation of cosmetic or dermatological preparations for the prophylaxis of damage to DNA intrinsic to the skin and/or for the repair of existing damage to

DNA intrinsic to the skin
IN Max, Heiner, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Will, Katriu, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Schimpf, Ralph, Bonningstedt, GERMANY, FEDERAL REPUBLIC OF
Raschke, Thomas, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Hargens, Birgit, Hamburg, GERMANY, FEDERAL REPUBLIC OF
PA Beiersdorf Aktiengesellschaft (non-U.S. corporation)
PI US 2002150601 A1 20021017
AI US 2001-21627 A1 20011212 (10)
PRAI DE 2000-10062401 20001214
DT Utility
FS APPLICATION
LREP KURT BRISCOE, NORRIS, MCLAUGHLIN & MARCUS, P.A., 220 EAST 42ND STREET, 30TH FLOOR, NEW YORK, NY, 10017
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 730
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . to the invention relates to folic acid itself, and not to its derivatives, to manage without other such substances, namely **flavonoids**.
SUMM . . . one co-ordination site on a central atom. In this case, normally extended compounds are thus closed as a result of **complex** formation via a metal atom or a metal ion to form rings. The number of bonded ligands depends on the. . .
SUMM . . . of tartaric acid and anions thereof, citric acid and anions thereof, aminopolycarboxylic acids and anions thereof (such as, for example, **ethylenediaminetetraacetic** acid (EDTA) and anions thereof, nitrilotriacetic acid (NTA) and anions thereof, hydroxyethylenediaminotriacetic acid (HOEDTA) and anions thereof, diethyleneaminopentaacetic acid (DPTA). . .
SUMM . . . linoleic acid, oleic acid), folic acid and derivatives thereof, ubiquinone and ubiquinol and derivatives thereof, vitamin C and derivatives (e.g. **ascorbyl** palmitate, Mg **ascorbyl** phosphate, **ascorbyl** acetate), tocopherols and derivatives (for example vitamin E acetate), vitamin A and derivatives (vitamin A palmitate) and coniferyl benzoate of. . .

L9 ANSWER 12 OF 29 USPATFULL
AN 2002:22645 USPATFULL
TI USE OF **FLAVONES** FLAVANONES AND **FLAVONOIDS** FOR PROTECTING **ASCORBIC** ACID AND/OR **ASCORBYL** COMPOUNDS FROM OXIDATION
IN SCHONROCK, UWE, NAHE, GERMANY, FEDERAL REPUBLIC OF
KRUSE, INGE, HAMBURG, GERMANY, FEDERAL REPUBLIC OF
PI US 2002013481 A1 20020131
AI US 1999-243568 A1 19990203 (9)
PRAI DE 1998-19807774 19980224
DT Utility
FS APPLICATION
LREP Kurt G. BRISCOE, NORRIS, MCLAUGHLIN & MARCUS, P.A., 220 EAST 42ND STREET 30TH FLR., NEW YORK, NY, 10017
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 980
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
TI USE OF **FLAVONES** FLAVANONES AND **FLAVONOIDS** FOR PROTECTING **ASCORBIC** ACID AND/OR **ASCORBYL** COMPOUNDS FROM OXIDATION
AB Use of at least one active ingredient chosen from the group consisting

of **flavones**, flavanones and **flavonoids** for protecting at least one active ingredient chosen from the group consisting of **ascorbic** acid and **ascorbyl** compounds from oxidation.

SUMM [0001] The present invention relates to the use of **flavones**, flavanones and **flavonoids** for protecting **ascorbic** acid and/or **ascorbyl** compounds in general from oxidation, in particular in cosmetic and dermatological preparations. The present invention preferably relates to cosmetic preparations. . .

SUMM . . . also cosmetic and dermatological preparations are tocopherol, butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), octyl gallate and dodecyl gallate and also **ascorbic**, lactic, citric and tartaric acids and salts thereof.

SUMM [0030] Excellent antioxidants per se are chosen from the group of **ascorbic** acid and **ascorbyl** compounds.

SUMM [0031] L-**Ascorbic** acid {(R)-5-[(S)-1,2-dihydroxyethyl]-3,4-dihydroxy-5-H-furan-2-one, vitamin C} is characterized by the structural formula ##STR1##

SUMM . . . soluble in water, readily soluble in alcohol, insoluble in ethers, petroleum ethers, chloroform, benzene and in fats and fatty oils. **Ascorbic** acid is an enediol and, as a reductone, has a strongly reducing effect. **Ascorbic** acid is heat-sensitive and is decomposed, in particular in the presence of traces of heavy metal and in an alkaline. . .

SUMM [0033] In cosmetic and dermatological preparations, **ascorbyl** compounds are often used instead of **ascorbic** acid, preferably **ascorbyl** esters of fatty acids, particularly preferably **ascorbyl** palmitate, since the sensitivity of these compounds to an oxidative effect is much less compared with **ascorbic** acid, and most of these compounds are more soluble in oil, which may offer pharmaceutical advantages.

SUMM [0034] **Ascorbyl** compounds in the narrower sense are, in particular, the **ascorbyl** esters of the general structure ##STR2##

SUMM [0039] A particular objective was to find ways of protecting **ascorbyl** compounds, in particular vitamin C and vitamin C esters from harmful oxidative effects, preferably in cosmetic or dermatological preparations.

SUMM [0040] The use of **flavones** and **flavonoids** in cosmetics and dermatology is known per se. For example, DE-A 44 44 238 describes combinations of cinnamic acid derivatives and **flavone** glycosides, for example .alpha.-glycosylrutin, as antioxidants and as active ingredients against other indications.

SUMM . . . person skilled in the art that the use of at least one active ingredient chosen from the group consisting of **flavones**, flavanones and **flavonoids** for protecting at least one active ingredient chosen from the group consisting of **ascorbic** acid and **ascorbyl** compounds from oxidation, in particular for protecting against oxidation in cosmetic or dermatological preparations, overcomes the disadvantages of the prior. . .

SUMM [0042] **Flavone** and its derivatives (often also collectively called "**flavones**") are characterized by the following basic structure (substitution positions are given): ##STR3##

SUMM [0043] Some of the more important **flavones**, which can also be found in living nature, are given in the table below:

	OH substitution positions							
	3	5	7	8	2'	3'	4'	5'
Flavone	-	-	-	-	-	-	-	-
Flavonol	+	-	-	-	-	-	-	-

Chrysin - + + - - - - -
Galangin + + + -. . .

SUMM [0044] In nature, **flavones** are usually in glycosylated form.

SUMM [0045] **Flavonoids** are glycosides of **flavones**, of flavanones, the basic skeleton of which is characterized by the following structure: ##STR4##

SUMM [0046] of 3-hydroxyflavones (**flavonols**), the basic skeleton of which is characterized by the following structure: ##STR5##

SUMM [0049] According to the invention, the **flavonoids** are preferably chosen from the group of substances having the generic structural formula ##STR8##

SUMM [0051] According to the invention, the **flavonoids** can however also be advantageously chosen from the group of substances having the generic structural formula ##STR9##

SUMM . . . independently of one another are advantageously chosen from the group consisting of H, OH, methoxy, ethoxy and 2-hydroxyethoxy, and the **flavone** glycosides have the structure ##STR11##

SUMM [0057] The **flavone** glycosides according to the invention are particularly advantageously chosen from the group represented by the following structure: ##STR12##

SUMM [0060] For the purposes of the present invention, it is particularly advantageous to choose the **flavone** glycoside(s) from the group consisting of .alpha.-glucosylrutin, .alpha.-glucosylmyricitrin, .alpha.-glucosylisoquercitrin and .alpha.-glucosylquercitrin.

SUMM [0061] One **flavonoid** which is particularly advantageous according to the invention is .alpha.-glucosylrutin. It is characterized by the following structure: ##STR13##

SUMM [0062] Another particularly advantageous **flavonoid** according to the invention is naringin (aurantiin, naringenine 7-rhamnoglucoside). It is characterized by the following structure: ##STR14##

SUMM [0063] Another particularly advantageous **flavonoid** according to the invention is hesperidin (3',5,7-trihydroxy-4'-methoxyflavanone-7-rutinoside, hesperidoside, hesperetin-7-O-rutinoside). It is characterized by the following structure: ##STR15##

SUMM [0064] Another particularly advantageous **flavonoid** according to the invention is rutin (3,3',4',5,7-pentahydroxyflavone-3-rutinoside, quercetin-3-rutinoside, sophorin, Birutan, rutabion, taurutin, phytomelin, melin). It is characterized by the following. . .

SUMM [0065] Another particularly advantageous **flavonoid** according to the invention is troxerutin (3,5-dihydroxy-3',4',7-tris(2-hydroxyethoxy)-**flavone**-3-(6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranoside)). It is characterized by the following structure: ##STR17##

SUMM [0066] Another particularly advantageous **flavonoid** according to the invention is monoxerutin (3,3',4',5-tetrahydroxy-7-(2-hydroxyethoxy)**flavone**-3-(6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranoside)). It is characterized by the following structure: ##STR18##

SUMM [0067] Another particularly advantageous **flavonoid** according to the invention is taxifolin (3,3',4',5,7-pentahydroxyflavanone) It is characterized by the following structure: ##STR19##

SUMM [0068] Another particularly advantageous **flavonoid** according to the invention is dihydrorobinetin (3,3',4',5',7-pentahydroxyflavanone). It is characterized by the following structure: ##STR20##

SUMM [0069] Another particularly advantageous **flavonoid** according to the invention is eriodictyol-7-glucoside (3',4',5,7-tetrahydroxyflavanone-7-glucoside). It is characterized by the following structure: ##STR21##

SUMM [0070] Another particularly advantageous **flavonoid** according to the invention is flavanomarein (3',4',7,8-tetrahydroxyflavanone-7-glucoside). It is characterized by the following structure: ##STR22##

SUMM [0071] Another particularly advantageous **flavonoid** according to the invention is isoquercitrin (3,3',4',5,7-pentahydroxyflavanone-3-(.beta.-D-glucopyranoside). It is characterized by the following structure: ##STR23##

SUMM [0072] According to the invention, the **flavone** derivative(s) and/or flavanone derivative(s), in particular **flavonoids**, are advantageously present in cosmetic or dermatological preparations preferably in amounts of from 0.001% by weight to 10% by weight,. . .

SUMM [0073] According to the invention, the **ascorbyl** compound or the **ascorbyl** compounds, in particular vitamin C, is/are advantageously present in cosmetic or dermatological preparations preferably in amounts of from 0.001% by. . .

SUMM [0074] The novel combination of at least one **flavone** derivative and/or flavanone derivative, in particular at least one **flavonoid** and at least one **ascorbyl** compound, in particular vitamin C, is, for the purposes of this specification, also collectively referred to as "active ingredient according. . .

SUMM . . . .alpha.-glucosylrutin to the corresponding preparations. In addition, the specifications EP-A 586 303 and EP-A 595 694 describe the use of **flavonoids** as antioxidants or light protection substances in cosmetics.

SUMM . . . or dermatological preparations are more stable than the respective active ingredients used individually, something which applies in particular to the **ascorbyl** compounds and very particularly to vitamin C.

SUMM [0085] The invention therefore relates to the use of active ingredient combinations of **flavones**, flavanones or **flavonoids** and **ascorbic** acid and/or **ascorbyl** compounds as an antioxidant and also to its use for the treatment and/or prophylaxis of skin ageing caused as a. . .

SUMM [0086] A particularly advantageous embodiment of the present invention is also the use of active ingredient combinations of **flavones**, flavanones or **flavonoids** and **ascorbic** acid and/or **ascorbyl** compounds for the treatment and/or prophylaxis of oxidative stress.

SUMM . . . one co-ordination site on a central atom. In this case, normally extended compounds are thus closed as a result of **complex** formation via a metal atom or a metal ion to form rings. The number of bonded ligands depends on the. . .

SUMM . . . of tartaric acid and anions thereof, citric acid and anions thereof, aminopolycarboxylic acids and anions thereof (such as, for example, **ethylenediaminetetraacetic** acid (EDTA) and anions thereof, nitrilotriacetic acid (NTA) and anions thereof, hydroxyethylenediaminotriacetic acid (HOEDTA) and anions thereof, diethyleneaminopentaacetic acid (DPTA). . .

DETD [0176]

O/W cream

	% by wt.
Glyceryl stearate	5.00
Cetyl alcohol	5.00
Isopropyl palmitate	7.00
Cyclomethicone	5.00
Ascorbic acid	3.00
.alpha.-Glucosylrutin	0.30
NaOH, 45% strength	1.00
Butylene glycol	3.00
Na.sub.2H.sub.2EDTA	0.20
Dyes, perfume, preservatives	q.s.
Water	ad 100.00

DETD . . . by wt.

Steareth-20	3.00
Cetyl alcohol	3.00
Cyclomethicone	6.00
Carbomer	0.60
Na.sub.2H.sub.2EDTA	0.20
Butylene glycol	3.00
NaOH, 45% strength	0.40
Ascorbic acid	0.50
.alpha.-Glucosylrutin	0.10
Dyes, perfume, preservatives	q.s.
Water	ad 100.00

DETD . . . % by wt.

Polyglyceryl-2-dipolyhydroxystearate	5.00
Caprylic/capric triglycerides	15.00
Butylene glycol	3.00
Na.sub.2H.sub.2EDTA	0.20
MgSO.sub.4	0.70
NaOH, 45% strength	0.32
Ascorbic acid	1.00
.alpha.-Glucosylrutin	0.20
Dyes, perfume, preservatives	q.s.
Water	ad 100.00

DETD [0179]

O/W gel

	% by wt.
Xanthan gum	2.00
Butylene glycol	3.00
Na.sub.2H.sub.2EDTA	0.20
NaOH, 45% strength	0.32
Ascorbic acid	1.00
.alpha.-Glucosylrutin	0.20
Dyes, perfume, preservatives	q.s.
Water	ad 100.00

DETD . . . polyacyladipate-2 3.00

Behenyl alcohol	4.00
Butylene glycol	3.00
Cetrimonium chloride	5.00
Citric acid	0.50
Na.sub.2H.sub.2EDTA	0.20
NaOH, 45% strength	0.16
Ascorbic acid	0.50
.alpha.-Glucosylrutin	0.10
Dyes, perfume, preservatives	q.s.
Water	ad 100.00

CLM What is claimed is:

1. Use of at least one active ingredient chosen from the group consisting of **flavones**, flavanones and **flavonoids** for protecting at least one active ingredient chosen from the group consisting of **ascorbic** acid and **ascorbyl** compounds from oxidation:

2. Use according to claim 1, characterized in that the active ingredient(s) chosen from the group consisting of **flavones**, flavanones and **flavonoids** is/are present in cosmetic or dermatological preparations in an effective amount.

3. Use according to claim 2, characterized in that the active

ingredient(s) chosen from the group consisting of **flavones**, flavanones and **flavonoids** is/are present in cosmetic or topical dermatological preparations in concentrations of 0.01-10% by weight, preferably 0.05-5% by weight, in particular. . .
4. Use according to claim 1, characterized in that the active ingredient(s) chosen from the group consisting of **ascorbic** acid and **ascorbyl** compounds is present in cosmetic or dermatological preparations in an effective amount.

5. Use according to claim 4, characterized in that the active ingredient(s) chosen from the group consisting of **ascorbic** acid and **ascorbyl** compounds is/are present in cosmetic or topical dermatological preparations in concentrations of 0.001-10% by weight, preferably 0.05-5% by weight, in. . .
6. Use according to claim 1, characterized in that the active ingredient chosen from the group consisting of **flavones**, flavanones and **flavonoids** is .alpha.-glucosylrutin.

. . . of tartaric acid and anions thereof, citric acid and anions thereof, aminopolycarboxylic acids and anions thereof (such as, for example, **ethylenediaminetetraacetic** acid and anions thereof, nitrilotriacetic acid and anions thereof, hydroxyethylenediaminotriaceti c acid and anions thereof, diethyleneaminopentaacetic acid and anions thereof, and. . .

L9 ANSWER 13 OF 29 USPATFULL
AN 2002:21850 USPATFULL
TI Delivery systems for a tooth whitener and methods of using the same
IN Sagel, Paul Albert, Mason, OH, UNITED STATES
Dirksing, Robert Stanley, Cincinnati, OH, UNITED STATES
Rohman, Frederick James, Loveland, OH, UNITED STATES
PA The Procter & Gamble Company (U.S. corporation)
PI US 2002012685 A1 20020131
AI US 2001-864772 A1 20010524 (9)
RLI Continuation of Ser. No. US 2000-605220, filed on 28 Jun 2000, PENDING Continuation of Ser. No. US 1998-196364, filed on 19 Nov 1998, GRANTED, Pat. No. US 6096328 Continuation-in-part of Ser. No. US 1998-42909, filed on 17 Mar 1998, GRANTED, Pat. No. US 6136297 Continuation-in-part of Ser. No. US 1997-870664, filed on 6 Jun 1997, GRANTED, Pat. No. US 5894017
DT Utility
FS APPLICATION
LREP THE PROCTER & GAMBLE COMPANY, PATENT DIVISION, HEALTH CARE RESEARCH CENTER, 8340 MASON-MONTGOMERY ROAD, MASON, OH, 45040
CLMN Number of Claims: 99
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1139
DETD . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Pat. No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .
DETD . . . catalysts of chemical reactions in living systems. Enzymes combine with the substrates on which they act forming an intermediate enzyme-substrate **complex**. This **complex** is then converted to a reaction product and a liberated enzyme which continues its specific enzymatic function.
DETD . . . adhesion. Proteases and amylases, not only present plaque formation, but also prevent the development of calculus by breaking-up the carbohydrate-protein **complex** that binds calcium, preventing mineralization.

DETD . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.

DETD . . . Additional components include, but are not limited to, flavoring agents, sweetening agents, xylitol, opacifiers, coloring agents, and chelants such as **ethylenediaminetetraacetic** acid. These additional ingredients can also be used in place of the compounds disclosed above.

L9 ANSWER 14 OF 29 USPATFULL
AN 2002:12012 USPATFULL
TI Delivery systems for a tooth whitener
IN Sagel, Paul Albert, Mason, OH, UNITED STATES
Dirksing, Robert Stanley, Cincinnati, OH, UNITED STATES
Rohman, Frederick James, Loveland, OH, UNITED STATES
PI US 2002006388 A1 20020117
AI US 2001-864686 A1 20010524 (9)
RLI Continuation of Ser. No. US 2000-605220, filed on 28 Jun 2000, PENDING Continuation of Ser. No. US 1998-196364, filed on 19 Nov 1998, GRANTED, Pat. No. US 6096328 Continuation-in-part of Ser. No. US 1998-42909, filed on 17 Mar 1998, GRANTED, Pat. No. US 6136297 Continuation-in-part of Ser. No. US 1997-870664, filed on 6 Jun 1997, GRANTED, Pat. No. US 5894017
DT Utility
FS APPLICATION
LREP THE PROCTER & GAMBLE COMPANY, PATENT DIVISION, HEALTH CARE RESEARCH CENTER, 8340 MASON-MONTGOMERY ROAD, MASON, OH, 45040
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 915
DETD . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .

DETD . . . catalysts of chemical reactions in living systems. Enzymes combine with the substrates on which they act forming an intermediate enzyme-substrate **complex**. This **complex** is then converted to a reaction product and a liberated enzyme which continues its specific enzymatic function.

DETD . . . adhesion. Proteases and amylases, not only present plaque formation, but also prevent the development of calculus by breaking-up the carbohydrate-protein **complex** that binds calcium, preventing mineralization.

DETD . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.

DETD . . . Additional components include, but are not limited to, flavoring agents, sweetening agents, xylitol, opacifiers, coloring agents, and chelants such as **ethylenediaminetetraacetic** acid. These additional ingredients can also be used in place of the compounds disclosed above.

L9 ANSWER 15 OF 29 USPATFULL
AN 2001:233148 USPATFULL
TI Delivery systems for a tooth whitener
IN Sagel, Paul Albert, Mason, OH, United States

Dirksing, Robert Stanley, Cincinnati, OH, United States
Rohman, Frederick James, Loveland, OH, United States
PI US 2001053375 A1 20011220
US 6551579 B2 20030422
AI US 2001-681729 A1 20010529 (9)
RLI Continuation of Ser. No. US 2000-605220, filed on 28 Jun 2000, PENDING Continuation of Ser. No. US 1998-196364, filed on 19 Nov 1998, GRANTED, Pat. No. US 6096328 Continuation-in-part of Ser. No. US 1998-42909, filed on 17 Mar 1998, GRANTED, Pat. No. US 6136297 Continuation-in-part of Ser. No. US 1997-870664, filed on 6 Jun 1997, GRANTED, Pat. No. US 5894017
DT Utility
FS APPLICATION
LREP THE PROCTER & GAMBLE COMPANY, PATENT DIVISION, HEALTH CARE RESEARCH CENTER, 8340 MASON-MONTGOMERY ROAD, MASON, OH, 45040
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 891
DETD . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .
DETD . . . catalysts of chemical reactions in living systems. Enzymes combine with the substrates on which they act forming an intermediate enzyme-substrate **complex**. This **complex** is then converted to a reaction product and a liberated enzyme which continues its specific enzymatic function.
DETD . . . adhesion. Proteases and amylases, not only present plaque formation, but also prevent the development of calculus by breaking-up the carbohydrate-protein **complex** that binds calcium, preventing mineralization.
DETD . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.
DETD . . . Additional components include, but are not limited to, flavoring agents, sweetening agents, xylitol, opacifiers, coloring agents, and chelants such as **ethylenediaminetetraacetic** acid. These additional ingredients can also be used in place of the compounds disclosed above.

L9 ANSWER 16 OF 29 USPATFULL
AN 2001:152497 USPATFULL
TI Oxidatively stable long-chain ethyl ester emollients
IN Kleiman, Robert, Mesa, AZ, United States
Koritala, Sambasivarao, Tempe, AZ, United States
Arquette, Demetrios James G., Tempe, AZ, United States
PA International Flora Technologies, Ltd, United States (U.S. corporation)
PI US 6287579 B1 20010911
AI US 1999-329882 19990611 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Prats, Francisco; Assistant Examiner: Coe, Susan D.
LREP The Halvorson Law Firm
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 593
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB . . . of at least one tocopherol and a supplemental ingredient selected from the class consisting of kojic acid, malic acid and **ascorbic** acid. The stabilization combination is particularly effective in combination with esters of long-chain organic molecules having less than 20% methylene. . . least one tocopherol and at least one supplemental additive selected from the group consisting of kojic acid, malic acid, and **ascorbic** acid. The long-chain ethyl ester may comprise an ethyl ester of a natural oil. The long-chain ethyl ester may have. . .

SUMM . . . hydroquinones (such as tertiary-butylhydroquinones, propyl gallate, and tocopherols). Reducing agents, or oxygen scavengers, encompass another class of antioxidants and include **ascorbic** acid (vitamin C) and its derivatives (such as esters of **ascorbic** acid, **ascorbyl** esters such as **ascorbyl** palmitate); sulfites (such as sulfur sulfite, alkali metal sulfites, and bisulfites, including alkali metal bisulfites); glucose oxidase (including catalase); erythorbic. . . been used to address problems with oxidation and include citric acid and its derivatives, polyphosphates, and aminopolycarboxylic acids (such as **ethylenediaminetetraacetic** * acid (EDTA)). There are additional antioxidant classes with less general areas of use.**

SUMM . . . **combinations of at least one tocopherol and supplemental ingredient selected from the class consisting of kojic acid, malic acid and ***ascorbic** acid. The stabilization combination is particularly effective in combination with esters of long-chain organic molecules having less than 20% methylene. . .

SUMM . . . least one tocopherol and at least one supplemental additive selected from the group consisting of kojic acid, malic acid, and **ascorbic** acid. The long-chain ethyl ester may comprise an ethyl ester of a natural oil. The long-chain ethyl ester may have. . .

SUMM . . . least one tocopherol and at least one supplemental additive selected from the group consisting of kojic acid, malic acid and **ascorbic** acid. The acids may be used in amounts of from about 0.01% by weight of the ethyl ester to about. . .

SUMM . . . anti-acne agents, anti-microbial agents, anti-perspiration agents, astringents, deodorants, hair removers, external analgesics, hair conditioners, skin conditioners, sun protecters, vitamins, catechines, **flavonoids**, ceramides, fatty substances, polyunsaturated fatty acids, essential fatty acids, keratolytic agents, enzymes, anti-enzymes, moisteners, anti-inflammatory substances, detergents, perfumes, and mineral. . .

DETD . . . tocopherol and at least one of the additional components selected from the group consisting of Kojic acid, malic acid and **ascorbic** acid produces improvement in the OSI results. The data clearly shows that significantly improved results are provided with oils having. . .

DETD Vegetable oils, such as soybean oil, are **complex** mixtures of triacylglycerols, esters of glycerols with three fatty acid chains per molecule. The term "percent methylene interrupted unsaturation" is. . .

CLM What is claimed is:

. . . least one tocopherol and at least one supplemental additive selected from the group consisting of kojic acid, malic acid, and **ascorbic** acid, wherein said tocopherol is present in an amount of from 0.01 to 5% by weight of said long-chain ethyl. . .

. . . least one tocopherol and at least one supplemental additive selected from the group consisting of kojic acid, malic acid, and **ascorbic** acid, wherein said tocopherol and said at least one supplemental additive in combination provide a greater oxidation stability to the. . .

. . . least one tocopherol and at least one supplemental additive selected from the group consisting of kojic acid, malic acid, and

ascorbic acid, wherein said tocopherol and said at least one supplemental additive in combination provide a greater oxidation stability to the. . .

. . . least one tocopherol and at least one supplemental additive selected from the group consisting of Kojic acid, malic acid, and **ascorbic** acid, wherein said tocopherol and said at least one supplemental additive in combination provide a greater oxidation stability to the. . .

5. The emollient composition of claim 4 wherein said supplement additive comprises **ascorbic** acid.

L9 ANSWER 17 OF 29 USPATFULL
AN 2000:141865 USPATFULL
TI Delivery system for an oral care substance using a strip of material having low flexural stiffness
IN Sagel, Paul Albert, Mason, OH, United States
Dirksing, Robert Stanley, Cincinnati, OH, United States
Rohman, Frederick James, Maineville, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 6136297 20001024
AI US 1998-42909 19980317 (9)
RLI Continuation-in-part of Ser. No. US 1997-870664, filed on 6 Jun 1997
DT Utility
FS Granted
EXNAM Primary Examiner: Rose, Shep K.
LREP Howell, John M., Zea, Betty J., Rasser, Jacobus C.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 938
DETD . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .
DETD . . . catalysts of chemical reactions in living systems. Enzymes combine with the substrates on which they act forming an intermediate enzyme-substrate **complex**. This **complex** is then converted to a reaction product and a liberated enzyme which continues its specific enzymatic function.
DETD . . . adhesion. Proteases and amylases, not only present plaque formation, but also prevent the development of calculus by breaking-up the carbohydrate-protein **complex** that binds calcium, preventing mineralization.
DETD . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.
DETD . . . Additional components include, but are not limited to, flavoring agents, sweetening agents, xylitol, opacifiers, coloring agents, and chelants such as **ethylenediaminetetraacetic** acid. These additional ingredients can also be used in place of the compounds disclosed above.

L9 ANSWER 18 OF 29 USPATFULL
AN 2000:98014 USPATFULL
TI Delivery system for an oral care substance using a strip of material having low flexural stiffness
IN Sagel, Paul Albert, Mason, OH, United States

Dirksing, Robert Stanley, Cincinnati, OH, United States
Rohman, Frederick James, Loveland, OH, United States
Majeti, Satyanarayana, Cincinnati, OH, United States
Reno, Elizabeth Ann, Fairfield, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 6096328 20000801
AI US 1998-196364 19981119 (9)
RLI Continuation-in-part of Ser. No. US 1998-42909, filed on 17 Mar 1998 which is a continuation-in-part of Ser. No. US 1997-870664, filed on 6 Jun 1997
DT Utility
FS Granted
EXNAM Primary Examiner: Rose, Shep K.
LREP Howell, John M., Suter, David L.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 996
DETD . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .
DETD . . . catalysts of chemical reactions in living systems. Enzymes combine with the substrates on which they act forming an intermediate enzyme-substrate **complex**. This **complex** is the converted to a reaction product and a liberated enzyme which continues its specific enzymatic function.
DETD . . . Proteases and amylases, not only present plaque formation, but also prevent the development of calculus by breaking-up the carbohydrate protein **complex** that binds calcium, preventing mineralization.
DETD . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.

L9 ANSWER 19 OF 29 USPATFULL
AN 1999:113557 USPATFULL
TI Methods of screening foods for nutraceuticals
IN Ghai, Geetha, Murray Hill, NJ, United States
Boyd, Charles, New Brunswick, NJ, United States
Csiszar, Katalin, New Brunswick, NJ, United States
Ho, Chi-Tang, East Brunswick, NJ, United States
Rosen, Robert T., Pottersville, NJ, United States
PA Rutgers, The State University of New Jersey, New Brunswick, NJ, United States (U.S. corporation)
PI US 5955269 19990921
AI US 1996-670826 19960620 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Myers, Carla J.
LREP Pennie & Edmonds LLP
CLMN Number of Claims: 43
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 2189
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD The destruction or disruption of the body's own tissues by the immune system results from a **complex** interaction of genetic and environmental factors. Such damage could arise as a result of, for

example, acute and chronic inflammation;. . .

DETD . . . an adenovirus is used as an expression vector, the donor DNA sequence can be ligated to an adenovirus transcription/translation control **complex**, e.g., the late promoter and tripartite leader sequence. This chimeric gene can then be inserted in the adenovirus genome by. . .

DETD . . . lanthanide series. These metals can be attached to the antibody using such metal chelating groups as diethylenetriaminepentacetic acid (DTPA) or **ethylenediaminetetraacetic** acid (EDTA).

DETD . . . Substances

Class	Compound	Source
Antioxidants		
	catechins	green tea
	theaflavins	black tea
	carnosol and carnosic acid	rosemary, sage
	tocopherol (Vit E)	oil seeds
	ascorbic acid (Vit C)	fruits, vegetables
Flavonoids		
water soluble		
	flavonoids and their glycosides	onions, apple
organic	methylated **flavonoids**	oranges
soluble		
Phenolic acids		
	caffeic acid, its dimers and esters	coffee bean, soy beans
	chlorogenic acid	coffee bean
	ferulic acid	fruits, soybean

. . .

DETD . . . are structurally related, and are grouped into families, such as but are not limited to allylic sulfur-containing compounds, terpenes, glucosinolates, **flavonoids**, and carotenoids. For example, terpenes are widely distributed in a variety of fruit oils, such as orange, grapefruit, lemon, lime. . .

CLM What is claimed is:

14. The method of claim 1, 2, 3, or 4, wherein the non-nutrient food substance comprises a terpene, carotenoid, **flavonoid**, polyphenol, allylic sulfur-containing compound, antioxidant, pseudoestrogen, or glucoinolate.

L9 ANSWER 20 OF 29 USPATFULL

AN 1999:15517 USPATFULL

TI Composition composed of an aqueous dispersion of stabilized vesicles of nonionic amphiphilic lipids

IN Ribier, Alain, Paris, France
Simonnet, Jean-Thierry, Paris, France
Handjani, Rose-Marie, Paris, France
Terren, Nadia, Chevilly-Larue, France

PA L'Oreal, Paris, France (non-U.S. corporation)

PI US 5866158 19990202

AI US 1996-736936 19961028 (8)

RLI Continuation of Ser. No. US 1995-473360, filed on 7 Jun 1995, now abandoned

PRAI FR 1992-9603 19920803
FR 1992-12343 19921015

DT Utility
FS Granted
EXNAM Primary Examiner: Kishore, Gollamudi S.
LREP Nixon & Vanderhye
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1362
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . such as cocoates, which contain from C.sub.5 to C.sub.17 alkyl chains, or isostearates, where the C.sub.17 alkyl chains are a **complex** mixture of isomeric forms; it likewise applies to products consisting of mixtures of mono-, di-, tri- or polyesters of the. . .

SUMM . . . example haemocyanin, which is a copper-containing protein extracted from marine snails, and apohaemocyanin, which is a similar protein without copper.

Flavonoids, in particular catechin, proanthocyanidins, flavanols, **flavones**, isoflavones, flavanenols, flavanones, flavans and chalcones.

Carotenoids, in particular .beta.-carotene and annatto.

Sorbohydroxyamic acid.

Tocopherols, in particular alpha-tocopherol and alpha-tocopherol acetate.

Ascorbyl palmitate.

Propyl gallate.

Caffeic acid and its derivatives.

Ascorbic acid.

Homogentisic acid.

Erythorbic acid.

Nordihydroguaiacetic acid.

Lysine laurylmethionate.

Butylated hydroxyanisole.

Butylated hydroxytoluene.

"SOD-like" substances.

Hydrating-gulator: A reconstitution of sweat ("Normal. . . citrus oils.

alpha-MSH and its synthetic homologues.

1) suntan accelerator: Caffeine.

Tyrosine derivatives, in particular glucose tyrosinate and N-malyltyrosine.

2) Depigmenting: **Ascorbic** acid or vitamin C and its derivatives, in particular

Mg **ascorbyl** phosphate.

Hydroxy acids, in particular glycolic acid.

Kojic acid.

Arbutin and its derivatives.

Haemocyanin (copper-containing protein of the marine snail). . . Indoles.

(artificial suntan): Dihydroxyacetone.

Erythrulose.

Glyceraldehyde.

gamma-Dialdehydes, in particular tartraldehyde.

Liporegulators: Complexes of vitamins and trace elements, in particular the vitamin B.sub.6 /zinc **complex**.

(slimming and anti-

Orizanol.

Azelaic acid.
acne, Xanthines and alkylxanthines, in particular
anti- extract of cola, caffeine and theophilline.
seborr- Cyclic and acyclic adenosine monophosphate.
hoea). . . Centella asiatica extract.
.beta.-Glycyrrhetinic acid.
Hydroxyproline.
Arginine.
A placental extract.
A yeast extract.
Fagaramide.
N-Acetylhydroxyproline.
Acexamic acid and its derivatives.
Vasopro-
Flavonoids, in particular rutin derivatives such
tective as etoxazorutin and sodium rutin propylsul-
phonate
Plant extracts, in particular Ginkgo biloba oily
extract. . . A grapefruit extract in glycerol and propylene
glycol.
Chlorhexidine.
Hexetidine.
Hexamidine.
Insect- Dimethyltoluamide.
repellent
agent
Antiper-
Aluminum chlorohydrate
spirant Aluminum chloride.
Sodium lactate aluminum chlorohydroxy **complex**.
zirconyl chlorohydrate.
Zinc oxide.
Deodorant
Zinc ricinoleate.
2 -Ethyl-1,3-hexanediol.
Hexachlorophene.
The product sold under the brand name
IRGASAN DP 300 .RTM..

. . .

DETD . . . g
Oxyethylenated sorbitan laurate containing
0.17 g
20 mol of EO, marketed by the company ICI
under the name TWEEN 20 .RTM.
Preservatives 0.3 g
Ascorbyl palmitate 0.01 g
Polyethylene glycol (molecular weight =
1.0 g
400)
Propylene glycol 3.0 g
Water 50.0 g
Sodium hyaluronate 0.1 g
Water 15.0 g
Mixture of. . .
DETD . . . the trade name
COVAFLUOR .RTM.
Phase D
Preservative 0.3 g
Demineralized water 1 g
Phase E
Silica microspheres (average diameter:
2 g

from 1 to 16 .mu.m)
Phase F
Ethylenediaminetetraacetic acid disodium
0.05 g
salt. 2H.sub.2 O
Vinylcarboxylic polymer synthesized in an
0.4 g
ethyl acetate/cyclohexane mixture, sold by
the company Goodrich under the. . .

L9 ANSWER 21 OF 29 USPATFULL
AN 1998:108235 USPATFULL
TI Device for detecting oxygen with oxidase
IN Gardiol, Alicia E., Montevideo, Uruguay
Hernandez, Ruben J., East Lansing, MI, United States
Harte, Bruce R., East Lansing, MI, United States
PA Board of Trustees operating Michigan State University, East Lansing, MI, United States (U.S. corporation)
PI US 5804401 19980908
AI US 1997-784088 19970115 (8)
RLI Continuation of Ser. No. US 1996-662537, filed on 13 Jun 1996, now patented, Pat. No. US 5654164 which is a continuation of Ser. No. US 1995-370403, filed on 9 Jan 1995, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Gitomer, Ralph
LREP McLeod, Ian C.
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 738
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB . . . reduced oxidase enzyme and for providing a calorimetrically detectable signal of the presence of the oxygen. A reduced laccase or **ascorbate** oxidase is preferably provided with a substrate which reduces the oxidase. Color is generated which can be detected visually or. . .
SUMM Enzymes, including the blue oxidases, laccase and **ascorbate** oxidase, have been used in oxidized form in biosensors fundamentally to detect substances in aqueous solution. Laccase has been incorporated. . . laccase on carbonic carriers (Varfolomeev, S. D., Methods in Enzymol. Vol. 137, Part D. pp. 430-440, Academic Press, Inc. (1986)). **Ascorbate** oxidase has been immobilized by affinity chromatography for assay of **ascorbic** acid (Mattiasson, B, et al., Carbohydr. Res. 102:273 (1982)).
SUMM Japanese Patent Appln. JP3236766A describes the use of **ascorbate** oxidase, a laccase phenol oxidase and an **ascorbate** substrate to deoxygenate a food containing the **ascorbic** acid. Oxygen is removed by the reduced oxidase to prevent the deterioration of the food. British Patent Appln. No. 2022249 describes a method where **ascorbic** acid is determined by means of the oxygen consumed from the reaction mixture and produced by an **ascorbate** oxidase. Neither method relates to provide a calorimetrically detectable response from the oxidase.
DRWD . . . The blue chromophore (Type 1 Cu.sup.+2) responsible for the enzyme blue color was reduced and decolorized (empty squares) with substrate **ascorbate**. As can be seen, the blue color was recovered by reoxidation (asterisks) with molecular oxygen.
DETD . . . contact with oxygen. Typically a metal chelating agent, such as EDTA, is used to prevent deterioration of the substrate, particularly **ascorbate**.
DETD The reducing substrates are for instance: phenols, mono-, diphenols

(catechol, resorcinol), and polyphenols, aminophenols, diamines, hexacyanoferrate (II), **ascorbic** acid and alkali metal **ascorbates**, particularly sodium **ascorbate**. Thus, various organic compounds which contain hydroxy, acidic or salt or amine groups can function as reducing substrates.

DETD **Ascorbate** oxidase is a blue oxidase which is available from various plants including Cucurbita pepo condensa (yellow crook-neck squash); Cucurbita pepo. . .

DETD The substrates for **ascorbate** oxidase are for instance: catechols, **flavonoids**, hydroxycinnamic acids, 2,6- and 2,5-dichlorohydroquinone, and 2,6-dichloroindophenol. Various organic compounds which contain acid, salt and hydroxy groups can be used.

DETD In the following Examples 1 and 2, blue oxidase enzymes, including laccase and **ascorbate** oxidase, have a blue chromophore prosthetic group, type 1 Cu.sup.+2, which can be reduced and decolorized with reducing substrates. When. . . concomitant return of the enzyme blue color. The oxygen biosensor consisted of the Rhus vernicifera laccase enzyme reduced with substrate **ascorbate** under optimized assay conditions, under nitrogen and enclosed in pouches of low density polyethylene. Operational stability of the oxygen biosensor. . .

DETD . . . and spectrophotometrically. Pouches of LDPE polymer support were used to enclose the enzyme/substrate system. The time of response of the **ascorbate** reduced enzyme (oxygen biosensor) to different gas-phase oxygen concentrations was characterized.

DETD . . . B. Reinhammer (Reinhammer, B. Purification and properties of laccase and stellacyanin from Rhus vernicifera. Biochim. Biophys. Acta. 205:35. (1970)). Sodium **ascorbate**, syringaldazine and gelatin were obtained from Sigma Chemical Co. (St. Louis, Mo.). All other chemicals were of analytical grade quality.

DETD **Ascorbate** oxidation activity of the laccase enzyme was determined by following the decrease in **ascorbate** absorbance at 265 nm (Oberbacher, M. F. and H. M. Vines. Spectrophotometric assay of **ascorbic** acid oxidase. Nature 197:1203-1204. (1963)) in a Perkin Elmer Lambda 4B spectrophotometer (Perkin Elmer, Oak Brook, Ill.). Buffer used was. . .

DETD Oxidized (blue) laccase enzyme from Rhus vernicifera laccase was used. Enzyme and **ascorbate** solutions were initially equilibrated with a nitrogen atmosphere having an oxygen concentration lower than 20 ppm. The enzyme, 0.1 ml. . . 167 enzyme units was equilibrated with a current of nitrogen gas in a screw-capped glass vial under ice (0.degree. C.). **Ascorbate** powder (15 mg) was first degassed under vacuum. **Ascorbate** solution was prepared (in the same screw-capped glass vial with rubber septum) by adding with a gas-tight syringe (Hamilton, Reno,. . . mM EDTA, previously equilibrated with nitrogen gas. Enzyme was reduced with substrate by addition (with a gas-tight syringe) of the **ascorbate** solution (0.05 ml) to the enzyme solution (0.1 ml) in a screw-capped glass vial with a rubber septum.

DETD TABLE 2

OPTIMIZED PARAMETERS	
ENZYME	Rhus vernicifera laccase
SUBSTRATE	Sodium **ascorbate**
POLYMERIC FILM	Low density polyethylene
POUCHES	0.7 .times. 3.0 cm
ENZYME CONCENTRATION	10 mg/ml = 0.09 mM
BLUE COPPER	1 Type 1 Cu.sup.+2 /enzyme. . .

DETD Enzyme activity with **ascorbate** as substrate

DETD The laccase enzyme has a wide range of reducing substrates including

sodium **ascorbate**, phenols, aminophenols and diamines (Reinhammer, B. Laccase, pp. 2-31. In R. Lontie (ed). Copper Proteins and Copper Enzymes. Vol III. CRC Press. (1984)). Although sodium **ascorbate** is not the best substrate for this enzyme in terms of reaction rate (Peterson, L., and H. Degn. Steady-state kinetics. . .

DETD The level of activity of the laccase enzyme with the substrate **ascorbate** was studied to establish the feasibility of the laccase/**ascorbate** system. With an **ascorbate** concentration of 0.2 mM and an enzyme concentration of 0.2 .mu.M, an acceptable rate of **ascorbate** oxidation of 0.7 nmoles per minute per ml of reaction mixture was obtained. This corresponds to 0.35 nmoles of oxygen. . .

DETD Autooxidation of **ascorbate** and levels of enzyme activity were both investigated with potassium phosphate buffer of the following pH values: 5.8, 6.5, 7.0,. . .

DETD To optimize the **ascorbate** concentration to be used in the oxygen biosensor, the following factors were considered.

DETD . . . oxidations; Kinetic evidence for the involvement of several electron-accepting sites in the enzyme. European J. Biochem. 9:383-391. (1969)). Therefore, the **ascorbate** concentration in the biosensor should be in excess of 4 electron equivalents per blue Cu.sup.+2. For an enzyme concentration of. . .

DETD (ii) Oxidative breakdown of **ascorbic** acid in liquids (in absence of enzyme) is **complex**, being dependent on pH, trace metals, light, initial dissolved oxygen concentration and temperature (Robertson, G. L. and C. M. L. Samaniego. Effect of Initial dissolved oxygen Levels on the degradation of **Ascorbic** acid and the browning of lemon juice during storage. J.Food Sci. 51:184-187. (1986)). As indicated above the buffer pH and EDTA concentration to chelate metals for minimal **ascorbate** autooxidation were determined. The effect of light was eliminated by carrying out the reaction in the dark, in sealed containers. . .

DETD (iii) The excess of **ascorbate** reducing equivalents with respect to type 1 blue Cu.sup.+2 is enough to detect a wide range of oxygen concentration with. . .

DETD Oxidized (blue) enzyme was reduced with substrate **ascorbate**, under nitrogen and under the optimal conditions for system activity and stability (Table 2), and then exposed to varying oxygen. . .

DETD The anaerobic reduction of laccase by different substrates, e.g. quinol, ferrocyanide, and **ascorbate** as well as the reoxidation of reduced laccase by molecular oxygen in aqueous solution with dissolved oxygen have been-studied (Malmstrom,. . .

DETD The laccase enzyme did not show a saturation kinetics with low substrates such as **ascorbate** and hydroquinone in solution (Peterson, L., and H. Degn. Steady-state kinetics of laccase from Rhus vernicifera. Biochim. Biophys. Acta. 526:85-92.. . .

DETD **Ascorbate** oxidase (L-**ascorbate**: O.sub.2 oxidoreductase E.C. 1.10.3.3.) from Cucurbita species (Boehringer Mannheim Biochemicals, Indianapolis, Ind.) was also able to substitute for laccase in. . . per enzyme molecule (Messerschmidt, A., et al (Eur. J. Biochem. 187:341-352 (1990)). Enzyme (0.037 mM) was reduced with excess of **ascorbate** substrate (25 mM) and enclosed in LDPE pouches under the same conditions indicated in Table 2 for the laccase enzyme.. . . at 53 h. This time response is very similar to the one obtained with the Rhus vernicifera laccase (FIG. 5B). **Ascorbate** oxidation with this enzyme is many orders of magnitude faster than with laccase. Therefore, this result supports the premise that. . .

DETD The **ascorbate** substrate concentration allows differentiation of a wide range of oxygen concentrations with clearly different reaction times. Lower amount of substrate. . .

DETD The data was based on an initial **ascorbate** concentration of 25

mM. The concentration of enzyme was 0.1 mM which corresponded to 0.1 mM equivalents of type 1. . . Based on the consideration that 4 equivalents of reducing substrate are needed per type 1 Cu.sup.+2, 0.4 mM equivalents of **ascorbate** are needed to decolorize 0.1 mM copper equivalents. Therefore, 24.6 mM equivalents of **ascorbate** have to be oxidized to recover the blue color. This requires 12.3 .mu.moles/ml of oxygen or 1.85 .mu.moles/0.15 ml. Oxygen. . .

CLM What is claimed is:
15. The device of claim 14 wherein the chelating agent is **ethylenediaminetetraacetic** acid.

16. The device of claim 13 wherein the substrate is an **ascorbate** salt.

17. The device of claim 16 wherein the **ascorbate** salt is sodium **ascorbate**.

L9 ANSWER 22 OF 29 USPATFULL
AN 1998:75227 USPATFULL
TI Method for the production of foodstuff using soluble casein compounds or caseinates and the product thereof
IN Veldkamp, Jeroen Jacobus Cornelius, Den Dungen, Netherlands
Broekhuis, John William, Hilversum, Netherlands
Wichers, Harm Jacob, Driebergen, Netherlands
PA Hak B.V., Giessen, Netherlands (non-U.S. corporation)
PI US 5773074 19980630
WO 9523516 19950908
AI US 1996-702576 19961008 (8)
WO 1995-NL78 19950302
19961008 PCT 371 date
19961008 PCT 102(e) date
PRAI NL 1994-320 19940302
DT Utility
FS Granted
EXNAM Primary Examiner: Pratt, Helen
LREP Young & Thompson
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 747
SUMM . . . discolouration; the beans themselves do so to a much lesser degree. The discolouration is assumed to be the result of **complex** formation between iron(III) ions and water-soluble tannins (polyphenols) from the seed coat of the pulses in the presence of oxygen.. . . area, a black compound is produced with the complexed polyphenols. Up to now, discolouration has been effectively prevented by adding **ethylenediaminetetraacetic** acid (EDTA) in the form of the calcium disodium salt (E 385) to the brine or syrup. EDTA is also. . .
SUMM . . . example pulses in glass containers. This research has been directed at, for example, complexing agents, such as dipyridyl, citric acid, **ascorbic** acid, polyphosphate and pyrophosphate. However, satisfactory results have not been achieved. Up to now, EDTA appeared to be irreplaceable.
SUMM When the process according to the invention was used, it appeared that **ascorbic** acid (vitamin C) and/or buffers of **ascorbic** acid and **ascorbate** has/have a beneficial effect on the action of the caseinate in respect of the prevention of discolouration reactions. The use of **ascorbic** acid/**ascorbate** buffers enables the acidity (pH) of the brine or syrup to be made more readily adjustable. As a result the. . . which is pH-dependent and

has an adverse effect, can be more easily controlled or even completely prevented. The amount of **ascorbic** acid and/or **ascorbate** can be, for example, between 0.01 and 10 g/l, preferably between 0.25 and 3.5 g/l.

SUMM . . . on the chain after polymerisation. These other reducing agents and organic acids are preferably used in the same amounts as **ascorbic** acid/**ascorbate**.

SUMM b. **flavones** and flavanonenes

SUMM 4. Addition of brine or syrup: Addition of a limited amount of water and/or oil in which sugar, salt, **ascorbic** acid and caseinate have been dissolved

DETD

*standard (1):	salt
	sugar
	1.0 gram **ascorbic** acid
	0.6 gram citric acid
*brine/syrup (2):	salt
	sugar
	1.0 gram **ascorbic** acid
	5.0 grams K caseinate
*brine/syrup (3):	salt
	sugar
	5.0 gram K caseinate

DETD Most inspectors preferred the sample containing 1 gram **ascorbic** acid in the brine/syrup. This sample has a clear, light brine/syrup, in contrast to samples 3 and 4 (clear, dark. . .

DETD A number of series were made containing decreasing amounts of **ascorbic** acid and a constant amount of caseinate. In addition, tests were carried out using a decreasing amount of caseinate alongside a constant amount of **ascorbic** acid.

DETD When preparing a brine/syrup, the **ascorbic** acid is dissolved in, for example, 750 ml of water and the caseinate is dissolved in the remaining 250 ml. The caseinate solution is then poured into the **ascorbic** acid solution.

DETD

Brine/syrup		**Ascorbic**	
	Caseinate	acid	Appearance of
			pH of
per liter			
	g/l	g/l	mixed brine/syrup
			brine/syrup
1	5.0	1.0	very smooth
			5.09
2	2.5	2.0	very. . .

DETD 3.2 In table the amounts of caseinate/**ascorbic** acid per liter and the pH of the final brine/syrup.

DETD 3.3 Brine/syrup with reducing amounts of **ascorbic** acid, pH of the brine/syrup and appearance of mixed brine/syrup shown in table.

DETD

Brine/syrup	**Ascorbic**		
	acid	Caseinate	Appearance of
			pH of
per liter			
	g/l	g/l	mixed brine/syrup
			brine/syrup

5 0.75 5.0 smooth 5.38
6 0.50 5.0 smooth 6.10
7. . .
DETD Reducing amounts of **ascorbic** acid, appearance and pH of the brine/syrup in Table 3.3.
DETD

Brine/syrup with addition of caseinate/**ascorbic** acid	Clarity of the brine/syrup	Precipitation in the brine/syrup	Turbidity
5.0/1.0	+++	++	-
2.5/1.0	++	(+)	++
1.0/1.0	+++	(+)	(+)
0.5/1.0	+++	(+). . .	

DETD Dissolution of the caseinate is dependent on the amount of **ascorbic** acid added (added later).
DETD The dosage of **ascorbic** acid which can be used, with the same results, is 0.75 g per liter brine/syrup (the same clarity).
DETD . . . kidney beans has been developed to replace EDTA. In this alternative brine/syrup potassium caseinate (roller-dried, DMV Campina, no. 41540) and **ascorbic** acid are added. K caseinate is a lactoprotein. Proteins are able to enter into bonds with tannins. These tannins, together. . .
DETD The experiment was carried out using the following combinations of caseinate and **ascorbic** acid in the brine/syrup:
DETD TABLE 1

Amounts of K caseinate and **ascorbic** acid added

Brine/syrup number	K caseinate added g/l	**Ascorbic** acid added g/l
1	2.5	1.0
2	5.0	1.0
3	2.5	3.5
4	5.0	3.5

DETD Table 1 Amounts of K caseinate and **ascorbic** acid added
DETD In addition to the abovementioned amounts of K caseinate and **ascorbic** acid, the standard ingredients in accordance with the customary methods were added to every brine/syrup. Two standard brine/syrup samples were. . .
DETD . . . in colour to be seen between the brines/syrups containing 2.5 g and 5.0 g caseinate and the same amount of **ascorbic** acid (brine/syrup 1 compared with brine/syrup 2 and brine/syrup 3 compared with brine/syrup 4).
DETD The difference in the amounts of **ascorbic** acid added, however, is clear. The colour of samples 3 and 4 clearly differs from that of samples 1 and 2 which contain the same amount of caseinate. **Ascorbic** acid has a bleaching action.
DETD It has been found from this experiment that potassium caseinate in combination with **ascorbic** acid would be a good alternative for EDTA. The colour of the samples in which 1.0 g **ascorbic** acid/l (brines/syrups 1 and 2) was used is fairly close to the colour of the standard sample in which EDTA. . .
DETD The greater the amount of **ascorbic** acid added, the lighter

becomes the colour of beans and brine/syrup.

DETD . . . As a supplementary experiment, an experiment was carried out to determine the effect of different caseinate salts and additions of **ascorbic** acid on capers.

DETD Experiment 2: Different caseinate salts and L-**ascorbic** acid dosages

DETD

Brine/syrup	Ingredients (g/l) in addition to 15 g salt
1	5 g K caseinate, 0.5 g **ascorbic** acid
2	5 g K caseinate, 1.0 g **ascorbic** acid
3	5 g K caseinate, 1.5 g **ascorbic** acid
4	5 g K caseinate, 1.75 g **ascorbic** acid
5	5 g Na caseinate, 0.5 g **ascorbic** acid
6	5 g Na caseinate, 1.0 g **ascorbic** acid
7	5 g Na caseinate, 1.5 g **ascorbic** acid

DETD 3.3 Dissolution of caseinates and L-**ascorbic** acid:

DETD 15 g of salt and the amount of **ascorbic** acid were dissolved in 900 ml:

DETD 4.2 EXPERIMENT 2: Different caseinate salts and L-**ascorbic** acid dosages.

DETD

K caseinate	Colour	Clarity
S: no **ascorbic** acid	dark	clear
1: 0.5 g **ascorbic** acid	lighter than S	as clear as S
2: 1.0 g **ascorbic** acid	lighter than S as light as 1 and 1	less clear than S
3: 1.5 g **ascorbic** acid	lighter than S as light as 1 than 2 and 2	even less clear
4: 1.75 g **ascorbic** acid	lighter than S as light as 1, 2, and 3	even less clear than 2, as clear as 3

DETD . . . different caseinate salts. The brine/syrup is appreciably clearer when caseinate is used. The colour has to be optimised by adding **ascorbic** acid. There is no difference between the samples containing 5 or 10 g of added caseinate per liter.

DETD 5.2 EXAMPLE 2: Different caseinate salts and L-**ascorbic** acid dosages.

DETD Addition of **ascorbic** acid gives a lighter colour but the addition of additional **ascorbic** acid in excess of 1 g does not produce an even lighter colour.

DETD The clarity of the brine/syrup decreases when more **ascorbic** acid is added. This is even the case for the brines/syrups with which no flocculation of caseinate has taken place. . .

DETD Na caseinate with 0.5 g **ascorbic** acid has the best colour and clarity.

CLM What is claimed is:
. . . less than 20 g per 1000 g of foodstuff including water and/or oil containing brine or syrup, and also adding **ascorbic** acid and/or **ascorbate** or another reducing agent selected from the group consisting of sulphurous acid and the salts thereof and the following (organic). . .
5. Method according to claim 1, wherein the **ascorbic** acid and/or **ascorbate** or another reducing agent is added in an amount of 0.01-10 g per liter of water, oil or mixture thereof.
. . .

L9 ANSWER 23 OF 29 USPATFULL
AN 1998:75168 USPATFULL
TI Compositions and methods for inhibiting the formation of unwanted skin pigmentation
IN Perrier, Eric, Les Cotes D'Aarey, France
Rival, Delphine, Lyons, France
PA Bioetica, Inc., Portland, ME, United States (U.S. corporation)
PI US 5773014 19980630
AI US 1996-710165 19961007 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Page, Thurman K.; Assistant Examiner: Faulkner, D.
LREP Cesari and McKenna, LLP
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 505
AB . . . active components of the compositions include extracts of certain selected plants, namely, mulberry, saxifrage, grape and scutellaria root; and, preferably, **ethylenediaminetetraacetic** acid (EDTA). These ingredients are combined with various cosmetically acceptable carriers to produce cream and lotion formulations capable of whitening. . .
SUMM The skin is a **complex** organ consisting of two basic layers, the epidermis and the underlying dermis (or corium), which are separated by the basal. . .
SUMM . . . ribosomal level. Tunicamycine and glucosamine inhibit the transfer of tyrosinase to the pre-melanosomes by interrupting glycosylation. And kojic acid and **ascorbic** acid (as well as their derivatives) inhibit the enzymatic activity of tyrosinase.
SUMM . . . since the observable effect is pronounced and quickly obtained with minimal side effects. Unfortunately, tyrosinase inhibitors such as kojic acid, **ascorbic** acid and their derivatives tend to be unstable in cosmetic preparations (due to high water content, significant variations in pH. . . the black or brown coloration of the cosmetic preparations. Moreover, although less cytotoxic than hydroquinone or linoleic acid, kojic and **ascorbic** acid products do exhibit some cytotoxicity.
SUMM . . . active components of the invention include extracts of certain selected plants, namely, mulberry, saxifrage, grape and scutellaria root; and, preferably, **ethylenediaminetetraacetic** acid (EDTA). These ingredients interact synergistically to strongly inhibit tyrosinase activity; that is, the inhibition of the combined product is. . .
DETD Useful extracts can be obtained from the root of Scutellaria baicalensis (also known as oughon). The extracts contain **flavonoids** such as woogonin, baicalin and baicalein, which have known tyrosinase inhibitory activity.
DETD e. **Ethylenediaminetetraacetic** Acid (EDTA)
DETD . . . over-the-counter whitening product, exhibits no tyrosinase-inhibiting activity. Its mechanism of action is not only

different but cytotoxic, particularly on melanocytes. **Ascorbic** acid was found to inhibit 66% of tyrosinase activity at a concentration of 0.1%; kojic acid inhibited 71% and 80% of tyrosinase activity at concentrations of 0.1% and 1%, respectively. At these concentrations, however, **ascorbic** acid and kojic acid typically produce black or brown colorations in cosmetic preparations.

DETD . . . whiteners: the IC.sub.50 of hydroquinone is 5.5.times.10.sup.-3 mg/ml, the IC.sub.50 of linoleic acid is 2.8.times.10.sup.-3 mg/ml, and the IC.sub.50 of **ascorbic** acid is 0.88 mg/ml.

CLM What is claimed:

. . . composition comprising: a. a mulberry extract; b. a saxifrage extract; c. a scutellaria extract; d. a grape extract; and e. **ethylenediaminetetraacetic** acid.

. . . 25-50 wt %; c. mulberry extract in the range 1-5 wt %; d. scutellaria extract in the range 1-5%; e. **ethylenediaminetetraacetic** acid in the range 0.1-5%; f. sodium sulfite in the range 0-5%; and g. sodium metabisulfite in the range 0-5%.

. . .

. . . b. 30 wt % grape extract; c. 5 wt % mulberry extract; d. 5% scutellaria extract; e. 0.5 wt % **ethylenediaminetetraacetic** acid; f. 1% sodium sulfite; and g. 1% sodium metabisulfite.

. . . a composition comprising: i. mulberry extract; ii. a saxifrage extract; iii. a scutellaria extract; iv. a grape extract; and v. **ethylenediaminetetraacetic** acid; and b. applying the composition to an area of skin, thereby inhibiting tyrosinase function within the area.

L9 ANSWER 24 OF 29 USPATFULL

AN 1998:42092 USPATFULL

TI Composition composed of an aqueous dispersion of stabilized vesicles of nonionic amphiphilic lipids

IN Ribier, Alain, Paris, France
Simonnet, Jean-Thierry, Paris, France
Handjani, Rose-Marie, Paris, France
Terren, Nadia, Chevilly-Larue, France

PA L'Oreal, Paris, France (non-U.S. corporation)

PI US 5741518 19980421

AI US 1996-698658 19960816 (8)

RLI Continuation of Ser. No. US 1995-473360, filed on 7 Jun 1995, now abandoned

PRAI FR 1992-9603 19920803
FR 1992-12343 19921015

DT Utility

FS Granted

EXNAM Primary Examiner: Kishore, Gollamudi S.

LREP Nixon & Vanderhye P.C.

CLMN Number of Claims: 13

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1335

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . such as cocoates, which contain from C.sub.5 to C.sub.17 alkyl chains, or isostearates, where the C.sub.17 alkyl chains are a **complex** mixture of isomeric forms; it likewise applies to products consisting of mixtures of mono-, di-, tri- or polyesters of the. . .

SUMM . . . example haemocyanin, which is a copper-containing protein extracted from marine snails, and apohaemocyanin, which is a similar

protein without copper.
Flavonoids, in particular catechin, proanthocyanidins, flavanols, **flavones**, isoflavones, flavanenols, flavanones, flavans and chalcones.
Carotenoids, in particular .beta.-carotene and annatto.
Sorbohydroxyamic acid.
Tocopherols, in particular alpha-tocopherol and alpha-tocopherol acetate.
Ascorbyl palmitate.
Propyl gallate.
Caffeic acid and its derivatives.
Ascorbic acid.
Homogentisic acid.
Erythorbic acid.
Nordihydroguaiacetic acid.
Lysine laurylmethionate.
Butylated hydroxyanisole.
Butylated hydroxytoluene.
"SOD-like" substances.

Hydrating — A reconstitution of sweat ("Normal. . . Bergamot and citrus oils.

gulator: alpha-MSH and its synthetic homologues.

1) suntan accelerator — Caffeine.
Tyrosine derivatives, in particular glucose tyrosinate and N-malyltyrosine.

2) Depigmenting — **Ascorbic** acid or vitamin C and its derivatives, in particular
Mg **ascorbyl** phosphate.
Hydroxy acids, in particular glycolic acid.
Kojic acid.
Arbutin and its derivatives.
Haemocyanin (copper-containing protein of the marine snail). . . Indoles.

(artificial suntan) — Dihydroxyacetone.
Erythrulose.
Glyceraldehyde.
gamma-Dialdehydes, in particular tartraldehyde.

Liporegulators (slimming and anti-acne, anti-seborrhoea). . . — Complexes of vitamins and trace elements, in particular the vitamin B.sub.6 /zinc **complex**.
Orizanol.
Azelaic acid.
Xanthines and alkylxanthines, in particular extract of cola, caffeine and theophilline.
Cyclic and acyclic adenosine monophosphate.
Centella asiatica extract.
.beta.-Glycyrrhetinic acid.
Hydroxyproline.
Arginine.
A placental extract.
A yeast extract.
Fagaramide.
H-Acetylhydroxyproline.
Acexamic acid and its derivatives.

Vasoprotective — **Flavonoid**, in particular rutin derivatives such as etoxazorutin and sodium rutin propylsulphonate.
Plant extracts, in particular Ginkgo biloba oily

extract. . . acid.
A grapefruit extract in glycerol and propylene glycol.
Chlorhexidine.
Hexetidine
Hexamidine.
Insect-repellent agent — Dimethyltoluamide.
Antiperspirant — Aluminum chlorohydrate.
Aluminum chloride.
Sodium lactate/aluminum chlorohydroxy **complex**.
Zirconyl chlorohydrate.
Deodorant
Zinc oxide.
Zinc ricinoleate.
2-Ethyl-1,3-hexanediol.
Hexachlorophene.
The product sold under the brand name IRGASAN DP 300 .RTM. .
Antidand-
. . .
DETD . . . g
Oxyethylenated sorbitan laurate containing 20 mol of EO, marketed by the company ICI under the name TWEEN 20 .RTM. — 0.17 g
Preservatives — 0.3 g
Ascorbyl palmitate — 0.01 g
Polyethylene glycol (molecular weight = 400) — 1.0 g
Propylene glycol — 3.0 g
Water — 50.0 g
Sodium hyaluronate — 0.1 g
Water — 15.0 g
Mixture of. . .
DETD . . . the trade name COVAFLUOR .RTM.
Phase D
Preservative — 0.3 g
Demineralized water — 1 g
Phase E
Silica microspheres (average diameter: from 1 to 16 .mu.m) — 2 g
Phase F
Ethylenediaminetetraacetic acid disodium salt. 2 H.sub.2 O — 0.05 g
Vinylcarboxylic polymer synthesized in an ethyl acetate/cyclohexane mixture, sold by the company Gooddrich under. . . — 0.4 g

L9 ANSWER 25 OF 29 USPATFULL
AN 97:99025 USPATFULL
TI Beverage compositions containing green tea solids, electrolytes and carbohydrates to provide improved cellular hydration and drinkability
IN Kuznicki, James Thaddeus, Cincinnati, OH, United States
Turner, Lana Sandman, Cincinnati, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S.

corporation)
PI US 5681569 19971028
AI US 1995-553935 19951106 (8)
RLI Continuation of Ser. No. US 1994-253646, filed on 3 Jun 1994, now patented, Pat. No. US 5464619
DT Utility
FS Granted
EXNAM Primary Examiner: Rose, Shep K.
LREP Guttag, Eric W.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 634
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . beverage composition of the present invention is green tea. It is believed that the green tea and in particular the **flavonols** present in green tea when incorporated into the beverage are responsible for the observed enhanced cellular rehydration.

SUMM As used herein, the term "carbohydrate" refers to monosaccharides, oligosaccharides, **complex** polysaccharides, or mixtures thereof. The monosaccharides include tetroses, pentoses, hexoses, and ketohexoses. Examples of hexoses are aldohexoses such as glucose,. . .

SUMM One of the **complex** carbohydrates usable for the present invention is maltodextrin. Maltodextrins are a form of **complex** carbohydrate molecule several glucose units in length. They are spray-dried carbohydrate ingredients made by controlled hydrolysis of corn starch. The. . .

SUMM . . . are edible organic acids which include citric acid, malic acid, fumaric acid, adipic acid, phosphoric acid, gluconic acid, tartaric acid, **ascorbic** acid, acetic acid, phosphoric acid or mixtures thereof The most preferred acids are citric and malic acids.

SUMM . . . also serve as an antioxidant to stabilize beverage components. Examples of commonly used antioxidant include but are not limited to **ascorbic** acid, EDTA (**Ethylenediaminetetraacetic** acid) and salts thereof.

DETD

EXAMPLE 1

Ingredients	Wt. %
Fruit Juice Concentrate	4.0
*Green Tea Solids	0.35
Flavoring	0.06
Sodium Citrate	0.32
Ascorbic Acid	0.01
Aspartame	0.01
Glucose	0.8
Water	94.45

*The green tea solids contain about 8% caffeine and about 29% unoxidized flavanols. The final. . .

DETD

Ingredients	Wt. %
Fruit Juice	1.7
Juice Concentrate	0.64
*Green Tea Extract	63
Lemon Lime Flavoring	0.3
Aspartame	0.25
Ascorbic Acid	0.1

Sodium Chloride	0.035
Colorant	0.1
Sodium Citrate	0.4
Emulsion	1.6
Water	31.875

*The green tea extract contains about 0.56% solids, about 0.04% caffeine

. . .

L9 ANSWER 26 OF 29 USPATFULL
AN 95:110442 USPATFULL
TI Bicyclic heterocyclic derivatives having .alpha..sub.1 -adrenergic and 5HT.sub.1A
IN Leonardi, Amedeo, Milan, Italy
Motta, Gianni, Barlassina, Italy
Riva, Carlo, Varese, Italy
Testa, Rodolfo, Milan, Italy
PA Recordati S.A., Chemical and Pharmaceutical Company, Chiasso, Switzerland (non-U.S. corporation)
PI US 5474994 19951212
AI US 1993-67861 19930526 (8)
DCD 20120404
RLI Continuation-in-part of Ser. No. US 1992-888775, filed on 26 May 1992, now patented, Pat. No. US 5403842
PRAI EP 1993-301264 19930222
DT Utility
FS Granted
EXNAM Primary Examiner: Rizzo, Nicholas; Assistant Examiner: Grumbling, Matthew V.
LREP Darby & Darby
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 6301
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM The compounds of the invention, described below, essentially include more **complex** amino moieties in place of the piperidine group. Further changes include alternatives to the ethoxycarbonyl group which links the amino. . .
SUMM . . . as prazosin(1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-furoyl)piperazine; GB 1,156,973) do not exhibit such selectivity (and in fact cause hypotension as a most common side-effect) while **flavone** derivatives structurally similar to flavoxate, such as terflavoxate (1,1-dimethyl-2-(1-piperidinyl)ethyl 3-methyl-4-oxo-2-phenyl-4H-1-benzopyran-8-carboxylate hydrochloride; EP 72 620) have no effect on urethral contractions.. . .
SUMM . . . aromatic solvent at 30.degree.-150.degree. C. For other de-sulfurization methods, like, e.g., nickel chloride and sodium borohydride in methanol or borane-pyridine **complex** in trifluoracetic acid or in dichloromethane in the presence of aluminum trichloride, see: J. March, "Advanced Organic Chemistry", pg. 728,. . .
SUMM borane-pyridine **complex** at 0.degree.-30.degree. C. followed by a protonating agent addition (e.g., hydrochloric acid);
DETD NMR CDCl.sub.3 (.delta.) 1.6-1.9 (4H, m, CHCH.sub.2 CH.sub.2 CH) 2.2 (3H, s, **flavone** CH.sub.3) 2.9 (2H, t, Fl'--CH.sub.2) 3.3 (6H, s, 2.times.OCH.sub.3) 4.4 (1H, t, CH(OCH.sub.3).sub.2) 7.3 (1H, dd, **flavone** CH in 6) 7.5-7.8 (6H, m, **flavone** CH in 7, and 5.times.phenyl CH) 8.1 (1H, dd, **flavone** CH in 5)
DETD NMR CDCl.sub.3 (.delta.) 1.9-2.1 (2H, dd, CH.sub.2 CH.sub.2 CH.sub.2 CHO) 2.2 (3H, s, **flavone** CH.sub.3) 2.5 (2H, t, CH.sub.2 CHO) 2.9 (2H, t, Fl'--CH.sub.2) 7.3 (1H, dd, **flavone** CH in 6)

7.5-7.7 (6H, m, **flavone** CH in 7, and 5.times.phenyl CH) 8.1 (1H, dd, **flavone** CH in 5) 9.7 (1H, s, CHO)

DETD . . .	5-HT	
	2 .mu.M	10 .mu.M
incubation	25.degree.	25.degree.
	30 min	30 min

c.m.p. = crude membrane preparation;
* = containing 1% **ascorbic** acid and 10 .mu.M pargyline (Nmethyl-N-2-propylbenzenemethanamine).

DETD . . . glycols, glycerine, propylene glycol or other synthetic solvents; antibacterial agents such as benzyl alcohol or methyl parabens; antioxidants such as **ascorbic** acid or sodium bisulfite; chelating agents such as **ethylenediaminetetraacetic** acid; buffers such as acetates; citrates or phosphates and agents for the adjustment of tonicity such as sodium chloride or. . .

L9 ANSWER 27 OF 29 USPATFULL
AN 95:98933 USPATFULL
TI Beverage compositions containing green tea solids, electrolytes and carbohydrates to provide improved cellular hydration and drinkability
IN Kuznicki, James T., Cincinnati, OH, United States
Turner, Lana S., Cincinnati, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 5464619 19951107
AI US 1994-253646 19940603 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Rose, Shep K.
LREP Dabek, Rose Ann, Rasser, J. C.
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 703
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . beverage composition of the present invention is green tea. It is believed that the green tea and in particular the **flavonols** present in green tea when incorporated into the beverage are responsible for the observed enhanced cellular rehydration.

SUMM As used herein, the term "carbohydrate" refers to monosaccharides, oligosaccharides, **complex** polysaccharides, or mixtures thereof. The monosaccharides include tetroses, pentoses, hexoses, and ketohexoses. Examples of hexoses are aldohexoses such as glucose,. . .

SUMM One of the **complex** carbohydrates usable for the present invention is maltodextrin. Maltodextrins are a form of **complex** carbohydrate molecule several glucose units in length. They are spray-dried carbohydrate ingredients made by controlled hydrolysis of corn starch. The. . .

SUMM . . . are edible organic acids which include citric acid, malic acid, fumaric acid, adipic acid, phosphoric acid, gluconic acid, tartaric acid, **ascorbic** acid, acetic acid, phosphoric acid or mixtures thereof. The most preferred acids are citric and malic acids.

SUMM . . . also serve as an antioxidant to stabilize beverage components. Examples of commonly used antioxidant include but are not limited to **ascorbic** acid, EDTA **ethylenediaminetetraacetic** acid) and salts thereof.

DETD

Ingredients	Wt. %
Fruit Juice Concentrate	4.0

*Green Tea Solids	0.35
Flavoring	0.06
Sodium Citrate	0.32
Ascorbic Acid	0.01
Aspartame	0.01
Glucose	0.8
Water	94.45

*The green tea solids contain about 8% caffeine and about 29% unoxidized flavanols. The final. . .

DETD

Ingredients	Wt. %
Fruit Juice	1.7
Juice Concentrate	0.64
*Green Tea Extract	63
Lemon Lime Flavoring	0.3
Aspartame	0.25
Ascorbic Acid	0.1
Sodium Chloride	0.035
Colorant	0.1
Sodium Citrate	0.4
Emulsion	1.6
Water	31.875

*The green tea extract contains about 0.56% solids, about 0.04% caffeine . . .

L9 ANSWER 28 OF 29 USPATFULL
AN 95:29644 USPATFULL
TI Benzopyran and benzothiopyran derivatives
IN Leonardi, Amedeo, Milan, Italy
Motta, Gianni, Barlassina, Italy
Riva, Carlo, Varese, Italy
Testa, Rodolfo, Milan, Italy
PA Recordati S.A., Chemical and Pharmaceutical Company, Chiasso, Switzerland (non-U.S. corporation)
PI US 5403842 19950404
AI US 1992-888775 19920526 (7)
PRAI IT 1992-408 19920225
DT Utility
FS Granted
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Grumbling, Matthew V.
LREP Darby & Darby
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3226
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM The compounds of the invention, described below, essentially include more **complex** amino moieties in place of the piperidine group. Further changes include alternatives to the ethoxycarbonyl group which spaces the amino. . .
SUMM . . . prazosin (1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-furoyl)piperazine; GB 1,156,973) do not exhibit such selectivity (and in fact cause hypotension as a most common side-effect) while **flavone** derivatives structurally similar to flavoxate, such as terflavoxate (1,1-dimethyl-2-(1-piperidinyl)ethyl3-methyl-4-oxo-2-phenyl-4H-1-benzopyran-8-carboxylate hydrochloride; EP 72 620) have no effect on urethral contractions. (Naturally,. . .

DETD NMR CDCl.sub.3 (.delta.) 1.6-1.9 (4H, m, CH.sub.2 CH.sub.2 CH.sub.2 CH.sub.2) 2.2 (3H, s, **flavone** CH.sub.3) 2.9 (2H, t, Fl'-CH.sub.2) 3.3 (6H, s, 2.times.OCH.sub.3) 4.4 (1H, t, CH(OCH.sub.3).sub.2) 7.3 (1H, dd, **flavone** CH in 6) 7.5-7.8 (6H, m, **flavone** CH in 7, and 5.times.phenyl CH) 8.1 (1H, dd, **flavone** CH in 5)

DETD NMR CDCl.sub.3 (.delta.) 1.9-2.1 (2H, dd, CH.sub.2 CH.sub.2 CH.sub.2 CHO) 2.2 (3H, s, **flavone** CH.sub.3) 2.5 (2H, t, CH.sub.2 CHO) 2.9 (2H, t, Fl'-CH.sub.2) 7.3 (1H, dd, **flavone** CH in 6) 7.5-7.7 (6H, m, **flavone** CH in 7, and 5.times.phenyl CH) 8.1 (1H, dd, **flavone** CH in 5) 9.7 (1H, s, CHO)

DETD . . . 7.4

nonspecific binding prazosin

	5-HT
	2 .mu.M 10 .mu.M
incubation	25.degree. 25.degree.
	30 min 30 min

---

c.m.p. = crude membrane preparation;
*containing **ascorbic** acid 1% and pargyline 10 .mu.M

DETD . . . glycols, glycerine, propylene glycol or other synthetic solvents; antibacterial agents such as benzyl alcohol or methyl parabens; antioxidants such as **ascorbic** acid or sodium bisulfite; chelating agents such as **ethylenediaminetetraacetic** acid; buffers such as acetates; citrates or phosphates and agents for the adjustment of tonicity such as sodium chloride or. . .

L9 ANSWER 29 OF 29 USPAT2
AN 2001:233148 USPAT2
TI Delivery systems for a tooth whitener
IN Sagel, Paul Albert, Mason, OH, United States
Dirksing, Robert Stanley, Cincinnati, OH, United States
Rohman, Frederick James, Loveland, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 6551579 B2 20030422
AI US 2001-681729 20010529 (9)
RLI Continuation of Ser. No. US 2000-605220, filed on 28 Jun 2000 Continuation of Ser. No. US 1998-196364, filed on 19 Nov 1998, now patented, Pat. No. US 6096328 Continuation-in-part of Ser. No. US 1998-42909, filed on 17 Mar 1998, now patented, Pat. No. US 6136297 Continuation-in-part of Ser. No. US 1997-870664, filed on 6 Jun 1997, now patented, Pat. No. US 5894017
DT Utility
FS GRANTED
EXNAM Primary Examiner: Rose, Shep K.
LREP Vago, James C.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 1012

DETD . . . polyepoxysuccinates such as those disclosed in U.S. Pat. No. 4,846,650 issued to Benedict, Bush & Sunberg on Jul. 11, 1989; **ethylenediaminetetraacetic** acid as disclosed in British Patent No. 490,384 dated Feb. 15, 1937; nitrilotriacetic acid and related compounds as disclosed in. . .

DETD . . . catalysts of chemical reactions in living systems. Enzymes combine with the substrates on which they act forming an intermediate enzyme-substrate **complex**. This **complex** is then converted to a reaction product and a liberated enzyme which continues its specific enzymatic function.

DETD . . . adhesion. Proteases and amylases, not only present plaque

formation, but also prevent the development of calculus by breaking-up the carbohydrate-protein **complex** that binds calcium, preventing mineralization.

DETD . . . included in the oral care composition or substance of the present invention include, but are not limited to Vitamin E, **ascorbic** acid, Uric acid, carotenoids, Vitamin A, **flavonoids** and polyphenols, herbal antioxidants, melatonin, aminoindoles, lipoic acids and mixtures thereof.

DETD . . . Additional components include, but are not limited to, flavoring agents, sweetening agents, xylitol, opacifiers, coloring agents, and chelants such as **ethylenediaminetetraacetic** acid. These additional ingredients can also be used in place of the compounds disclosed above.